THE EFFECT OF USING READ ENCODE ANNOTATE AND PONDER (REAP) STRATEGY TOWARD READING COMPREHENSION IN NEWS ITEM TEXT OF THE FIRST YEAR STUDENT AT STATE ISLAMIC SENIOR HIGH SCHOOL DUMAI

By

FANNY DWI PRATIWI

NIM. 10814001755

FACULTY OF EDUCATION AND TEACHER TRAINING

STATE ISLAMIC UNIVERSITY OF SULTAN SYARIF KASIM

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By

FANNY DWI PRATIWI

NIM. 10814001755

DEPARTMENT OF ENGLISH EDUCATION

FACULTY OF EDUCATION AND TEACHER TRAINING

STATE ISLAMIC UNIVERSITY OF SULTAN SYARIF KASIM RIAU

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ABSTRACT

Fanny Dwi Pratiwi (2012). The Effect of Using REAP (Read, Encode, Annotate, and Ponder) Strategy Toward Reading Comprehension in News Item Text of The First Year Student at State Islamic Senior High School Dumai.

The objectives of this research were to find out the ability of the first year students in comprehending news item reading text without using Read, Encode, Annotate, and Ponder (REAP) strategy, to find out the ability of the first year students in comprehending news item reading text by using Read, Encode, Annotate, and Ponder (REAP) strategy, and to obtain the effect of using Read, Encode, Annotate, and Ponder (REAP) strategy toward reading comprehension in News Item Text of the first year students at State Islamic Senior High School Dumai.

The researcher carried out the formulation of problems that would be answered by using the research quantitative. That was quasi-experimental by using non-equivalent control group design. The design based on pretests, posttests, and the use of a control group was employed in this research.

The subject of this research was the first year students at MAN Dumai. The object of this research was the effect of REAP Strategy. The population of this research was all of the first year students in the academic year of 2011/ 2012. The sample was chosen through cluster random sampling. One was nominated as the experimental group and the other was the control group.

To analyze the data, the researcher used Independent t-test formula. The result of analyzing the data was 3.481. It was compared to $t\text{-}_{table}$ at significant level 5% (2.01) and at significant level 1% (2.68). T_o was higher than $t\text{-}_{table}$. Therefore, null hypothesis (h_o) was rejected, and alternative hypothesis (h_a) was accepted which showed $2.01<3.481>2.68$. It meant that there was significant effect of using REAP Strategy toward the Reading Comprehension of The First year Students at State Islamic Senior High School Dumai.

ABSTRAK

Fanny Dwi Pratiwi (2012).Pengaruh Penggunaan Strategy REAP (membaca, menyandikan, mencatat keterangan, dan mempertimbangkan) terhadap Pemahaman Membaca Siswa Kelas Satu di Madrasah Aliyah Negeri Dumai.

Tujuan penelitian ini adalah untuk menemukan kemampuan siswa kelas satu dalam memahami teks bacaan news item tanpa menggunakan strategy REAP (membaca, menyandikan, mencatat keterangan, dan mempertimbangkan), untuk menemukan kemampuan siswa kelas satu dalam memahami teks bacaan news item dengan menggunakan strategy REAP (membaca, menyandikan, mencatat keterangan, dan mempertimbangkan), dan untuk mendapatkan pengaruh penggunaan strategy REAP(membaca, menyandikan, mencatat keterangan, dan mempertimbangkan), terhadap pemahaman membaca teks news item siswa kelas satu MAN.

Peneliti mengangkat rumusan masalah yang akan dijawab dengan menggunakan penelitian kuantitatif. Jenisnya adalah kuasi eksperimen yang menggunakan rancangan kelompok-kontrol nonekuivalen. Rancangan ini berdasarkan pada pra-tes, pasca-tes dan penggunaan kelas control yang berperan dalam penelitian ini.

Subjek penelitian adalah kelas satu Madrasah Aliyah Negeri Dumai. Objek penelitian adalah pengaruh strategi REAP. Populasi penelitian adalah seluruh kelas satu tahun akademik 2011/2012. Sampel dipilih melalui *cluster random sampling*. Satu kelas ditetapkan sebagai kelas eksperimen dan satu kelas sebagai kelas kontrol.

Untuk menganalisis data, peneliti menggunakan *Independent t-test Formula.* Hasil analisis data adalah 3.481. Hasil ini dibandingkan dengan $t\text{-}_{table}$ pada level signifikansi 5% (2.01) dan pada level signifikansi 1% (2.68). T hitung lebih besar dari pada $t_{\text{-table.}}$ Oleh karena itu, null hypothesis (h_o) ditolak, dan alternative hypothesis (h_a) diterima yang menunjukkan $2.01<3.481>2.68$. Ini berarti bahwa ada pengaruh yang signifikansi menggunakan strategi REAP terhadap pemahaman membaca siswa kelas satu di Madrasah Aliyah Negeri Dumai.

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CHAPTER I

INTRODUCTION

A. BACKGROUND OF THE PROBLEM

Reading is the most important things in language skills. It is supported by Glynis Hannell's statement that reading is an important life skill.[1] The importance of reading becomes an aspect that should be considered among language skills. Reading is an interactive process that goes on between the reader and the text, resulting in comprehension.[2] Therefore, to find out the information of reading text, the reader should have a good comprehension. A good reading comprehension will guide the reader to find out the meaning of the context, whether literal or implied meaning. Besides, a good reading comprehension will show the reader reading ability. Therefore, a good comprehension is necessary in comprehending the meaning what the writer writes.

Reading is an activity that needs a process and a purpose. In reading, there are three processes to get a purpose. They are pre reading, whilst reading and post reading. The purposes of reading are to gain information or verify existing knowledge, or in order to critique a writer's idea or writing style, to read for enjoyment or to enhance knowledge of the language being

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[1] Glynis Hannel. *Success with Inclusion 1001 Teaching Strategies and Activities that Really Work.* (New York : Routledge, 2008), p. 26

[2] Kalayo Hasibuan and Fauzan Anshari. *Teaching English as a Foreign Language[TEFL]*. (Pekanbaru :Alaf Riau Graha UNRI Press, 2007), p. 114

read, to guide the reader's selection of texts, and to determine the appropriate approach to reading comprehension.[3]

The purpose of reading based on the standardization of English course competence is to understand the meaning (interpersonal, ideational, textual) in some written texts that have communicative purpose, structural text, and certain linguistic.[4] It means that, reading includes a receptive skill. Therefore, a reader should have the best strategy to obtain a good comprehension of the messages in reading text. That is way, reading learning process is necessary to get a well comprehension. In learning process, a teacher uses several reading strategies in teaching reading. As defined by David Pearson and his colleagues, reading comprehension strategies are "conscious and flexible plans that readers apply and adopt to a variety of texts and tasks.[5] Therefore, reading needs a concentration seriously. It also needs a critical thinking to comprehend the meaning of reading text. A critical thinking will create an active learning.

The active learning has been available in School Based Curriculum. School Based Curriculum is a curriculum that demands the active learning to the students. Nowadays, many schools have applied this curriculum in Indonesia. MAN Dumai is one of the schools applying School Based Curriculum. In this school, reading is one skill of the English subject taught

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[3] *www.nclrc.org/essential/reading/stratread.htm.* Retrieved on December 05, 2010

[4] Tim penulis , *Standar Kompetensi Mata Pelajaran Bahasa Inggris Sekolah Menengah Atas dan Madrasah Aliyah*, (Jakarta: Departemen Pendidikan Nasional, 2003), p.16

[5] Michael F. Graves. *Teaching Reading in the 21st Century* (USA: A Pearson Education Company, 2001), P. 310

since the first year of English teaching period. In teaching reading at the first year, the students learn about some of texts such as descriptive, narrative and news item.[6] On the second semester, the students learn the news item reading text. The passing score of English course that is settled by this school is 7,00. In teaching reading, the students' reading comprehension is not still maximal although the teacher uses the strategy namely discussion. For example, the teacher explains the material and asks the students learn with the small groups and the teacher gives a text. Then, they are asked to read the reading text. If they find out the difficulties words, they can open dictionary. After that, the students are asked to determine the communicative purposes of text. Then they answer the questions about the text. After that, the students are asked to answer the question together. In this case, the text that is given by the teacher is news item text. News item is factual text that is used to inform readers, listeners, or viewers about events of the day which are considered newsworthy or important.[7]

Ideally, the students should be able to comprehend about the reading text and comprehend what they are reading. In fact, they still find out difficulties to comprehend about the reading text even though the teacher has given the learning strategy. The difficulties of the students' reading comprehension can be showed into 5 phenomena:

1. Some of the students are not able to identify about the reading for meaning.

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[6] *Syllabus of MAN Dumai* 2011/2012. Unpublished.

[7] Th. M. Sudarwati, dkk. *Look Ahead: an English Course* (Jakarta :Penerbit Erlangga, 2007), P. 98

2. Some of the students are still not able to find out the factual information of reading text.
3. Some of the students are not able to find out the main idea of the reading text.
4. Some of the students are not able to find out the meaning of word references or similar meaning.
5. Some of the students are not able to identify the communicative purpose of the reading text.

Based on the researcher's preliminary study, the students have reading desirability, but the use of discussion strategy is not able yet to improve their reading comprehension. It can be seen from the degree of the students' passing score. When the teacher consider how important reading is within the classroom and everyday life, it is not surprising that students who find reading difficult often become embarrassed, frustrated, distraught or angry.[8]To anticipate this situation, the teacher should refurbish the strategy to be more appropriate one in teaching reading, in order that the students are able to comprehend texts that are given by the teacher. In this research, the researcher offers one strategy in reading comprehension namely REAP strategy. REAP includes ten varieties of annotations, each of them focus on different aspects of a text, that help to improve student writing skills, metacognitive awareness, and comprehension of main ideas.[9] The steps are:

[8] Glynis Hannel. *O*p. cit, p. 26

[9] Learning Strategies Database. *General-Purpose Learning Strategies*. (Muskingum College Center for Advancement of Learning Reading Comprehension), p. 73

1. Introduce to the class what they will be doing. Discuss with them what the acronym REAP means and what they will be looking for.

   Read : to get the writer's basic message.

   Encode : to translate the message into your own words

   Annotate : the message by writing a response in one of several possible forms

   Ponder : What you have read and written, by yourself and then by sharing and discussing it with others.[10]

2. Have each student choose a partner.
3. Release the students to do the activity.

Casanave, one of researchers, finds out that the readers have to use some active comprehension strategies to help them understand a text. There are three stages in the reading process before reading, whilst reading, and after reading. In general, the following reading strategies are used by the learners in the reading process: finding a focus for understanding, establishing a relationship between initial learning and text meaning, thinking about the meaning of text, making conclusions about the text, using prior knowledge for comprehension, controlling reading speed, making predictions about the meanings of unfamiliar words, and making predictions about the meanings of unknown groups of words or sentences in the text. The REAP strategy can be described as an eclectic combination of these

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http://www.muskingum.edu/~cal/database/bibliography_subject.html. Learning Strategies Database. Retrieved on Februari 28, 2011.

[10] Anthony V. Manzo and Ula Casale Manzo. *Teaching Children to be Literate: A Reflective Approach.* (Kansas: Harcourt Brace College, 1995), p. 357

strategies.[11] Therefore, REAP strategy can be considered as a strategy toward the students' reading comprehension.

Based on the explanation and the problem above, the researcher is interested in conducting a research entitled **The Effect of Using Read, Encode, Annotate, and Ponder (REAP) Strategy toward Reading Comprehension in News Item Text of the First Year Student at State Islamic Senior High School Dumai.**

B. THE DEFINITION OF THE TERM

In order to avoid misunderstanding and misinterpretation, it would be better for the writer to define a number of terms used in this study.

1. REAP (Read, Encode, Annotate and Ponder)

REAP is a reading and responding strategy that uses writing as means of promoting deeper thinking and reading. REAP is a way to teach the students a variety of possible ways to write in response to reading. The basic REAP procedure is summarized by its title:

Read : to get the writer's basic message.

Encode : to translate the message into your own words.

Annotate : the message by writing a response in one of several possible forms

[11] Mehmet Tasdemir. The Effects of The REAP Reading Comprehension Technique on Students' Success. *Social Behavior and Personality: an International Journal, Social Behavior and Personality: An International Journal* . V 38 N 4 pp. 553-560 May 1, 2010

Ponder : what you have read and written, by yourself and then by sharing and discussing it with others.[12]

REAP strategy is one of the strategies that emphasizes on critical thinking and comprehending in reading. By using REAP, the students comprehend text by using written form and orally. Indirectly, the students not only comprehend text but also encourage the students to write and speak.

2. Strategy

Strategy is a series of ordered steps that will allow a student to perform a task. The strategy serves to help structure the students' efforts (i.e.,to do the steps in order) and to remind the student what to do at each stage of the process.[13] In this study, strategy deals with the way used by the students to comprehend reading text. Strategy that is used in this research is Read, Encode, Annotate, and Ponder.

3. Reading Comprehension

Reading is a process perceiving a written text in order to understand its contents[14]. Reading becomes a subject matter in this research. Comprehension is an active process to which each reader brings his or her individual attitudes, interests, expectations, skills, and prior knowledge (reader context).[15] In this case, comprehension deals with reading. Reading comprehension means a process or product of understanding the text in

[12] Anthony V. Manzo and Ula Casale Manzo. *Loc.cit*

[13] Robert Reid and Torri Ortiz Lienemann. *Strategy Instruction for Students with Learning Disabilities*. (New York :The Guilford Press, 2006), p. 18

[14] Jack C. Richards, et al. *Longman of Language Teahing and Applied Linguistics* (London :Longman, 1992), p. 306

[15] Judith Westphal Irwin. *Teaching Reading Comprehension Processes*. (New Jersey: Prentice Hall,Inc, 1986). p 7

order to get information and the meaning of the text. Therefore, the researcher is interested in conducting reading comprehension.

C. THE IDENTIFICATION OF THE PROBLEM

Based on the background and the phenomena above, the researcher finds out that the problems that are identified as follows:

1. Why are the students not able to identify about the reading for meaning?
2. Why are the students not able to find out the factual information of reading text?
3. Why are the students not able to find out the main idea of reading text?
4. Why are the students not able to find out the meaning of word references or similar meaning?
5. Why are the students are not able to identify the communicative purpose of reading text.

1. The Limitation of the Problem

Based on the identifications of the problems above, there are some problems involving in this research. In this research, the researcher only focuses on the effect of using Read, Encode, Annotate, and Ponder (REAP) Strategy toward reading comprehension in news item text of the first year student at State Islamic Senior High School Dumai.

2. The Formulation of the Problem

Based on the identification above, finally the problem is formulated as follows:

a. How is the ability of the first year students at State Islamic Senior High School Dumai in comprehending news item reading text by using discussion strategy?

b. How is the ability of the first year students at State Islamic Senior High School Dumai in comprehending news item reading text by using Read, Encode, Annotate, and Ponder (REAP) strategy?

c. Is there any significant effect of using Read, Encode, Annotate, and Ponder (REAP) strategy in comprehending news item reading text of the first year students at State Islamic Senior High School Dumai?

D. THE OBJECTIVES AND THE SIGNIFICANCE OF THE RESEARCH

1. The Objectives of the Research

a. To find out the ability of the first year students at State Islamic Senior High School Dumai in comprehending news item reading text by using discussion strategy.

b. To find out the ability of the first year students at State Islamic Senior High School Dumai in comprehending news item reading text by using Read, Encode, Annotate, and Ponder (REAP) strategy

c. To obtain the effect of using Read, Encode, Annotate, and Ponder (REAP) strategy toward reading comprehension in News Item Text of the first year students at State Islamic Senior High School Dumai.

2. The Significance of the Research

a. To give a contribution about the strategy to English teachers concerning with reading comprehension.

b. To provide useful information for the students about the reading strategy, in order the students can apply it in comprehending the reading text.

c. To fulfill one of the requirements to finish writer's study in State Islamic University Sultan Syarif Kasim Riau.

CHAPTER II

THE THEORETICAL FRAMEWORK

A. THE NATURE OF READING COMPREHENSION

1. The Nature of Reading

According to Haris and Sipay in Manzo's book, reading is the meaningful interpretation of written language. Others have tended to define reading in ways that reflect the perspective of their research or school of thought. For example:

a. Anderson, a cognitive psychologist, has popularized the view that reading is a process of constructing meaning from written text
b. Perfetti, a linguist, sees reading in more instrumental terms, referring to it as thinking guided by print.
c. Goodman, a linguist and educational humanist, tends to see reading more as a natural extension of language process, but with some special benefits. Language, he says, enable us to share experience, learn from others, and to plan and work together. Written language expands this process to those who are not present, those who have died, and those yet to be born.[1]

In conclusion, reading emphasizes on process to encode the writer's messages into their own comprehending. Reading also gives information to the reader needed.

[1] Anthony V. Manzo and Ula Casale Manzo. *Op.cit,* p. 10

Reading is fluent process of readers combining information from a text and their own background knowledge to build meaning. The goal of reading is comprehension.[2] The purpose for reading also determines the appropriate approach to reading comprehension.[3] Michael states that reading is a conscious, deliberate act prompted by a plausible purpose. Purpose is what motivates us, helps focus our attention, or gives us goal, something tangible to work toward. He also says that purpose also determines how a selection is to be read-quickly in order to get the gist of the text or slowly in order to really understand the material. Also, having clear purposes aids comprehension.[4] A good reading is how the readers have the purpose of what they read. The readers know that reading text is interesting or not, if they have good comprehension. It means that the primary activity of reading is to comprehend what the text about. Many readers cannot catch the idea or what the writer talks about. It is caused by not knowing the exact meaning of the words that the writer uses. In short, reading is a readers' activity having process and some purposes in reading a written language.

Reading is an extraordinary achievement when one considers the number of levels and components that must be mastered.[5] The National Reading Panel, the Partnership for Reading, the National Institute for Literacy, the National Institute of Child Health and Human Development,

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[2] David Nunan. *Practical English Language Teaching*. (New York :Mc. Graw Hill, 2003), p. 68

[3] Kalayo Hasibuan and Fauzan Anshari. *Loc.cit*

[4] Michael F. Graves.*Op.cit*, P. 248

[5] Danielle S. Mc Namara. *Reading Comprehension Strategies: Theories, Interventions, and Technologies.* (New York : Lawrence Erlbaum Associates, 2007), p. 3

and the U.S. Department of Education have identified five essential components to effective literacy instruction: phonemic awareness, phonological processing, fluency, vocabulary, and text comprehension.[6]

a. Phonemic Awareness

Phonemic Awareness is the ability to hear and manipulate the sounds of spoken language. This includes noticing rhyme and recognizing the separate, small sounds in words (phonemes).[7] Phonemic awareness is commonly defined as the understanding that spoken words are made up of separate units of sound that are blended together when words are pronounced. However, it can also be thought of as skill at hearing and producing the separate sounds in words, dividing or segmenting words into their component sounds, blending separate sounds into words, and recognizing words that sound alike or different. Phonemes are the sounds that make up spoken words. They are the smallest segments of sounds within spoken language. For example, the word no is made up of two phonemes: /n/ and /o/.[8]

b. Phonological Processing

Phonics is the understanding of the relationship between the written letters of the alphabet and the sound of spoken language. This

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[6] Robert Reid and Torri Ortiz Lienemann. *Strategy Instruction for Students with Learning Disabilities*. (New York : The Guilford Press, 2006), p. 150.

[7] Janet B. Andreasen, Ph.D., Lee-Anne T. Spalding, M.Ed, and Enrique Ortiz, Ed.D. *CliffsNotes: FTCE Elementary Education K-6, TEST PREP 'Proven Test-taking Strategies Focus Reviews of all Exam Topics 2 Model Practice Exams, Plus a Diagnostic Exam to Measure Your Strengths and Weaknesses*'.(Florida: Wiley Publishing,Inc,), p. 47

[8] Learning Point Associates. *A Closer Look at the Five Essential Components of Effective Reading Instruction : A Review of Scientifically Based Reading Research for Teachers*. www.learningpt.org.2004. P.4

knowledge allows a reader to “decode” words by translating the letters into speech sounds.

c. Fluency

Fluency is the ability to read quickly, accurately, and with proper expression. Fluent readers can concentration understanding what they read because they do not have to focus on decoding. Reading fluency includes the following:

1. Accuracy : ability to correctly read the words in a text.
2. Automatically of words : ability to instantly recognize a large bank to quickly decode unfamiliar words.
3. Rate : speed of reading
4. Prosody : ability to read with appropriate rhythm, intonation, and expression.[9]

Reading fluency is also highly correlated with reading comprehension. Fluent readers are able to decode text with speed, accuracy, and expression. Reading fluently is dependent upon word recognition skill. Students who are not fluent readers often have difficulty gaining the meaning of text. [10]

[9] Janet B. Andreasen, *Op.cit.*, p. 48
[10] Robert Reid and Torri Ortiz Lienemann.*Loc.cit.*

d. Vocabulary

Vocabulary includes all the words the reader can understand and use. The more words the students know, the better he or she will understand what is read.[11]

e. Text Comprehension

Comprehension involves constructing meaning that is reasonable and accurate by connecting what has been read to what the reader already knows and thinking about all of this information until it is understood. Comprehension is the final goal of reading instruction.[12]

Components of reading are the instrumental aspect that be used to get the purposes of reading. They strongly relate to build the meaning of text.

2. Microskills, Macroskills, and Strategies for Reading

According to Nunan, the microskills and macroskills below represent the spectrum of possibilities for objectives in the assessment of reading comprehension.[13]

a. Microskills

1. Discriminate among the distinctive lengths in short-term memory.

[11] Janet B. Andreasen, Ph.D, et al. *Op.cit.,* p. 47
[12] Learning Point Associates. *Op.cit.*, P.30
[13] H. Douglas Brown. *Language Assessment Principle and Classroom Practices*. (California :Longman, 2003), p.188-189

2. Retain chunks of language of different lengths in short-term memory.
3. Process writing at an efficient rate of speed to suit the purpose.
4. Recognize a core of words, and interpret word order patterns and their significance.
5. Recognize grammatical word classes (nouns, verbs, systems (e.g., tense, agreement, pluralization), pattern, rules, and elliptical forms.
6. Recognize that a particular meaning may be expressed in different grammatical forms.
7. Recognize cohesive devices in written discourse and their role in signaling the relationship between and among clauses.

b. Macroskills

1. Recognize the rhetorical forms of written discourse and their significance for interpretation.
2. Recognize the communicative functions of written texts, according to form and purpose.
3. Infer context that is not explicit by using background knowledge.
4. From described events, ideas, etc., infer links and connections between events, deduce causes and effects, and detect such relations as main idea, supporting idea, new information, given information, generalization, and exemplification.

5. Distinguish between literal and implied meanings.
6. Detect culturally specific references and interpret them in a context of the appropriate cultural schemata.
7. Develop and use a battery of reading strategies, such as scanning and skimming, detecting discourse markers, guessing the meaning of words from context, and activating schemata for the interpretation of the texts.

c. Some Principal Strategies for Reading Comprehension

1. Identify your purpose in reading a text.
2. Apply spelling rules and conventions for bottom-up decoding.
3. Use lexical analysis (prefixes, roots, suffixes, etc) to determine meaning.
4. Guess at meaning (of words, idioms, etc) when you aren't certain.
5. Skim the text for the gist and for main ideas.
6. Scan the text for specific information (names, dates, key words).
7. Use silent reading techniques for rapid processing.
8. Use marginal notes, outlines, charts, or semantic maps for understanding and retaining information.
9. Distinguish between literal and implied meanings.
10. Capitalize on discourse markers to process relationships.

Some principle strategies for reading comprehension above have been available in REAP strategy. Teaching reading by using REAP strategy will be explained in the next part.

3. Background to the Teaching of Reading

Reading is an essential skill for learners of English as a second language. For most of these learners, it is the most important skill to master in order to ensure success not only in learning English, but also in learning in any content class where reading in English is required. With strengthened reading skills, learners will make greater progress and development in all other areas of learning. The teaching of reading for learners of English as a foreign language is not quite different from learners of English as a second language.

a. Silent Reading

Reading is primarily a silent activity. The majority of reading that we do will be done silently. In western cultures oral reading was the primary practical until the nineteenth century. Classroom approaches to teaching reading should emphasize the silent nature of this skill and avoid overemphasis on oral reading.[14] Michael states that silent reading is a terrific way to begin the school day. The students are relaxed and ready to learn following the silent reading session. Further he says that if students are asked to do silent reading only when their

[14] David Nunan. *Practical English Language Teaching*. (New York : Mc. Graw Hill, 2003), p. 69

other assignments are done, this almost guarantees that the least successfully students will get the least amount of time to read independently and the least opportunity to develop fluent, success oriented reading practice.[15]

Silent reading may be subcategorized into intensive and extensive reading. Intensive reading is usually a classroom-oriented activity in which students focus on the linguistic or semantic details of a passage. Intensive reading calls students' attention to grammatical forms, discourse markers, and other surface structure details for the purpose of understanding literal meaning, implications, rhetorical relationships, and the like. Extensive reading is carried out to achieve a general under-standing of a text. All pleasure reading is extensive. Technical, scientific, and professional reading can (and should) also be extensive.[16]

b. Reading Processes

Reading is an interactive process that goes on between the reader and the text, resulting in comprehension. The text presents letters, words, sentences, and paragraphs that encode meaning. The reader gets knowledge, skills, and strategies to determine what the meaning is. Reader knowledge, skills, and strategies include:

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[15] H. Douglas Brown. *Teaching by Principles.* (New Jersey: Prentice Hall Regents). p. 600.

[16] *Ibid*. p. 297.

1. Linguistic competence: the ability to recognize the elements of the writing system; knowledge of vocabulary; knowledge of how words are structured into sentences.
2. Discourse competence: knowledge of discourse markers and how they connect parts of the text to one another.
3. Sociolinguistic competence: knowledge about different types of texts and their usual structure and content.
4. Strategic competence: the ability to use top down strategies, as well as knowledge of the language (a bottom up strategy).[17]

The models can be divided into three categories: bottom-up models, top down models, and interactive models. Bottom up models typically consist of lower level reading processes. Students start with the fundamental basics of letter and sound recognition, which in turn allows for morpheme recognition followed by word recognition, building up to the identification of grammatical structures, sentences, and longer texts.

Top down models, on the other hand, begin with the idea that comprehension resides in the reader. The reader uses background knowledge, makes predictions, and searches the text to confirm or reject the predictions that are made. A passage can thus be understood even if all of the individual words are not understood. Within a top down

[17] Kalayo Hasibuan and Muhammad Fauzan Ansyari, *Op.cit.* p. 115

approach to reading the teacher should focus on meaning generating activities rather than on mastery of word recognition.

c. Interactive models of reading

Interactive models are the models that are accepted as the most comprehensive description of the reading process. It combines elements of both bottom up and top down models assuming "that a pattern is synthesized based on information provided simultaneously from several knowledge sources".[18]

The process in reading is necessary to get comprehension in each reading activity. The forms of this process involve three kinds. They are bottom up, top down and interactive process. Bottom up is how to comprehend the meaning started by fundamental aspect in reading, top down is used by concerning background knowledge of text and interactive process is combination of bottom up and top down process.

4. Reading Comprehension

Comprehension can be seen as the process of using one's own prior experiences (reader context) and the writer's cues (text context) to infer the author's intended meaning. This process can involve understanding and selectively recalling ideas in individual sentences (micro-processes), inferring relationships between clauses and or sentences (integrative

[18] David Nunan.*Op.cit*, p. 70-72

processes), organizing ideas around summarizing ideas (macro-processes), and making inferences not necessarily intended by the author (elaborative processes). These processes work together (interactive hypothesis) and can be controlled and adjusted by the reader as required by the reader's goals (meta-cognitive processes) and the total situation in which comprehension is taking place (situational context)[19]. Cooper states that comprehension is a process in which the reader may construct meaning by interacting with the text. In reading comprehension, the reader should have knowledge about understanding the reading passage. The common questions on the passages are primarily about the main ideas, details, and an inference that can be drawn from the passages. In brief, reading is an activity to get main purpose. It is a comprehension.

There are two levels of thinking and how each can shape comprehension:

a. Surface level. The surface level of comprehension is a literal level of understanding represented by the ability to recall factual information from the text. This retrieval process involves short-term memory; thus, this level of understanding directly relates to the recency of the reading.
b. Deep level. The deep level of comprehension is a conceptual level of understanding that results from the reader's ability to think beyond the text, thus integrating the author's intentions with the reader's point of

[19] Judith Westphal Irwin.*Loc.it.* P. 9

view. At this level, the author's message serves as a pivotal point in regulating the reader's deeper thinking.[20]

The levels above can be used by the students to know how deeper their comprehension about the content of text. In the surface level, the readers just comprehend the meaning of text, but in the deep level, the readers not only comprehend the text but also criticize the text.

5. Basics For Teaching Comprehension

a. Explicative function.

Explicative function explains of how to do things. Teachers need to tell students why an answer is not the best and how to change approaches to arrive at better answers. Moreover, teachers can model affective strategies for the students by describing their own thinking processes.

b. Continuum of Independence.

For every skill, each student can be placed on a continuum from being very dependent on the teacher or instructional materials for guidance to being capable of performing the skill in a completely independent way. The goal is to provide the guidance students need in such a way that they progress toward increasing independence.

c. Vertical and Horizontal Transformation.

Transformation is the process of modifying or transforming skills to apply in situations different from the one in which they were

[20] Linda J. Dorn and Carla Soffos. *Teaching For Deep Comprehension : A Reading Workshop Approach*. (Portland: Stenhouse Publishers, 2005), p. 14

learned. According to Herber, the transforming of skills across content areas “horizontal transformation” and the transforming of skills across grade levels “vertical transformation.” The important point is that transformations do not necessarily occur without teacher guidance.

d. Interrelationship of Reading and Writing.

Teaching outlining as a reading/note-taking skill is certainly related to teaching outlining as a first step in writing an essay. Teaching students to find main ideas in social studies books is related to teaching students to include main ideas in social studies reports. Although reading researchers are now only beginning to investigate this hypothesis systematically, it seems quite possible that writing instruction can be used to reinforce reading skills, and vice versa.

e. Comprehension Context.

Good teachers consider the readers, the text, and the total situation when deciding how to structure tasks.

f. Meaningful Context.

Students are more likely to interact actively with material that they are reading for a meaning-oriented purpose than with paragraphs they are reading as abstract exercises for skill development.

g. Holistic Process.

An activity stressing summarizing skills will still require the students to use the other processes to some extent.[21]

[21] Judith Westphal Irwin.*Loc.it.* p 15

According to Singer, reading comprehension has been defined as an interpretation of written symbols, the apprehending of meaning, the assimilation of ideas presented by the written, and the process of thinking while deciphering symbols. Further, reading comprehension is related closely to the cognitive competence of the readers, because this will produce comprehension. Consider some of the following overt responses that indicate comprehension:

1. Doing : the reader responds physically to a command
2. Choosing: the reader selects from alternatives posed orally or in writing.
3. Transferring: the reader summarizes orally what is read.
4. Answering: the reader answers question about the message.
5. Condensing: the reader outlines or takes notes on a passage.
6. Extending: the reader provides an ending to a story.
7. Duplicating: the reader translates the message into the native language or copies it (beginning level, for very short passages only).
8. Modeling: the reader puts together a toy, for example, after reading directions for assembly.
9. Conversing: the reader engages in a conversation that indicates appropriate processing of information.[22]

One of the purposes of teaching reading is to know the ability in comprehending the text. The use of REAP strategy will help the students to

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[22] H. Douglas Brown. *Teaching By Principles. Op.cit*. P. 300

comprehend the text. In REAP strategy, the students will be emphasizes on the responses that indicate comprehension that explained above.

B. NEWS ITEM READING TEXT

Based on the first year syllabus of the first semester, the students learn some kinds of text. One of them is news item text.[23] News item is used to inform readers, listeners or viewers about events of the day which are considered newsworthy or important. The generic structures of news item are :

1. Newsworthy event (s) : recount the event in the summary form.
2. Background event (s) : elaborate what happened, to whom, in what circumstances
3. Sources : comments by participants in, witnesses to and authorities expert on the event.

The Language Features of News Item:

1. Short, telegraphic information about story captured in headline.
2. Use of material processes to retell the event
3. Use of material processes to retell the event

a. Focus on circumstances.[24]

[23] *Syllabus of MAN Dumai* 2011/2012. Unpublished.
[24] Th. M. Sudarwati, dkk. *Loc.it.*

The example of news item text:

Singapore : A supervisor was jailed for two months for repeatedly striking his Indonesian maid on the head and back with a television remote.

Muhammad Shafiq Woon Abdullah was brought to court in Singapore because he had physically hurt the woman on several occasions between June and October 2002, the Straits Time said.

The miagistrate's court heard that Shafiq, 31, began striking Winarti about a month after she started working for him.

He hit her on the head with the TV sets remote control because he was unhappy with her work. On one occasion, he punched her on the back after accusing her of daydreaming

S.S. Dillon, Shafiq's lawyer, said that his client had become mad when he saw his daughter's face covered as she was lying in bed. He said his client thought the maid had put the child danger.

(Taken from : Look Ahead)

C. TEACHING READING BY USING REAP STRATEGY

The teacher can use the following steps to guide teaching reading by using REAP strategy.

Step 1 Feeling. Students read or listen to a selection. They are encouraged to express their initial, "gut level" responses to the piece.

Step 2 Expressing. Students attempt to explain their feelings about the piece twenty-five words or less.

Step 3 Sighting the Objective. The teacher provides students with a well-written example of a critical response and ask them how is like, or about, what they have read.

Step 4 Selecting. Students read a second selection. This time the teacher show three or four critical responses to the selection : one of the

sample responses should be a good critical response, and the others should each be faulty in some way-too emotional, too narrow, not directly related to the idea(s) in the selection, and/or lacking sufficient support. Students discuss the sample responses and choose the best one. They are asked to defend their choice and explain why the others are unsatisfactory.

Step 5 Modeling Response Writing. Students read a third selection. This time the teacher "thinks aloud" to show students how to write a critical response to text. This involves showing students how to draft initial thoughts, and then reorganize and rewrite these as necessary to compose an honestly felt but balanced statement.

Step 6 Practicing. Students read a fourth selection and individually try writing their own critical response. A few of the students' productions are duplicated or put on the chalkboard and then discussed and evaluated by the teacher and class.

Step 7 Sequencing. Once students have tried their hand at writing a few critical responses, the teacher introduces another form of response to the text.

Step 8 Reinforcing Dialogue. The teacher has students exchange their brief responses and try to write in response to one another's work. At this point the teacher should introduce the idea of letters to the editor from newspaper and magazine as examples of dialogue centered on issue and text, and as print models of effective writing

from which students can learn incidentally each time they read a newspaper or magazine.[25]

Using REAP strategy in the teaching of reading has some benefits in improving students' reading comprehension. REAP strategy activates the students to critical thinking. It is supported by Roberta and Sharon's statements, they state that encoding or retelling helps students process what they read, annotation encourages students to construct deeper meaning of the text, thus promoting higher-level thinking skills. By definition, annotations are brief; they require more thinking than writing; however, it is active response that makes the ideas meaningful. An annotation can describe the basic ideas in the text or can go beyond the author's ideas to form personal applications and connections.[26]

D. THE EFFECT OF USING READ, ENCODE, ANNOTATE AND PONDER (REAP) STRATEGY TOWARD THE STUDENTS' READING COMPREHENSION

REAP develops independent reading skills by encouraging the reader to put the main idea of the passage into his/her own words, both orally and in written form. REAP is an effective strategy for students in grades four through high school. Because it is a multisensory approach to learning its effectiveness is enhanced. It is particularly beneficial for students with

[25] Anthony V. Manzo and Ula C. Manzo. *Op.cit*, P 357-361

[26] Roberta L. Sejnost and Sharon M. Thiese. *Building Content Literacy Strategies for The Adolescent Learner*. (California: A Sage Company, 2010), p. 66-67

learning problems because it encompasses analysis and synthesis.[27] In using REAP strategy, the reader not only improve reading comprehension but also improve writing skill.

Eanet and Manzo developed the REAP strategy for composing annotations of texts. The acronym stands for read, encode, annotate, and ponder. Intended for use by high school or college students, REAP includes ten varieties of annotations, each focusing on different aspects of a text, that help to improve student writing skills, metacognitive awareness, and comprehension of main ideas. For instructors, the annotation types help to "illustrate the reading process and also to encourage mature reading and study strategy use".

Annotating has several benefits. Besides making texts more meaningful, annotating improves student attention while reading and makes reading a more active process. Annotation writing enhances information processing and, in turn, improves registration of information in memory. There is less information to remember when it has been summarized in an annotation, and annotations are written in a student's own words. Students exposed to annotation writing are better able to write succinct summaries of texts, which may improve performance on exams and standardized tests. Annotating focuses student attention on those aspects of text often overlooked while reading. While the strategy may be used for nearly any

[27] Smith, C. C. and Bean, T. W. *A strategy for improving* reading, *writing and study skills. Journal* of *Reading*, 19, 647. 3.(1980).

subject, it is especially helpful in English courses in which summary and critique writing are common requirements.

Read : The first step of the strategy is to read the text. If other reading strategies like SQ3R or PARTS may be used at this stage, as they relate to the type of annotation to be written.

Encode : After reading the text, the information is paraphrased by the student into his/her own words.

Annotate : Annotations are brief summaries of a text that explain and/or critique the text. Different aspects of the text are handled differently when writing annotations.

Ponder : The student evaluates the annotation for accuracy and completeness. Consider how the text relates to other readings, to course objectives, and to classroom activities.

In brief, the use Read, Encode, Annotate, and Ponder (REAP) strategy can influence comprehension in reading. In REAP, there are some annotations that improve comprehension in reading. Students are asked to critical thinking and annotate what they have read before through annotation. There are some annotation types in the REAP strategy. The ten annotation types employed with the REAP strategy are described below:

1. Summary Annotation

The student's interpretation of the text is given in the summary annotation. Only the most important ideas are included in a clear, succinct summary. Details such as examples, statistics, story plot, and descriptions are not included in the summary annotation

2. Thesis Annotation

The thesis annotation is similar to the summary annotation in that the purpose is to clearly state the main idea of the text, answering the question "What is the main point that the author is trying to get across to the reader?" Unlike the summary annotation, the thesis annotation need not be written in complete sentences.

3. Question Annotation

The student's interpretation of the main point of the text is given in this type of annotation. That interpretation may or may not coincide with the author's stated or implied thesis. To write the question annotation, answer the question "What question(s) is/are the author trying to answer in the text?" The annotation should be written in question form

4. Critical Annotation

In the critical annotation, the reader states his/her position on the author's thesis. The reader may agree, disagree, or agree partly with the author's position. Three sentences comprise the critical annotation: the first sentence restates the author's main idea, the second sentence gives the reader's response, and the third sentence explains or defends the reader's position.

5. Heuristic Annotation

This type of annotation mixes the author's and reader's words with respect to the main idea of the text. Written in a stimulating manner, the heurisitic annotation restates the thesis in the author's and reader's words. The former are indicated by quotation marks (") and the latter are set off with brackets ([ ]) in the annotation.

6 Intention Annotation.

The author's purpose, goal or intention for writing the text is given in the intention annotation. Using knowledge about the author, the author's language and writing style, and your feelings about the text, indicate what you believe the author's reason for writing the text is.

7. Motivation Annotation

In the motivation annotation, the reader speculates on what motivated the author to write the text and to include the facts included in the text. Consider "What kind of person would write something like this?" Use clues in the text to write interpretations about the author.

8. Probe Annotation

Questions, practical points, and issues in the text that deserve further explanation are given in the probe annotation. The reader should ask "About what do I want to know more?" and "Why is this so?"

9. Personal View Annotation

The reader is given the opportunity to draw upon his/her personal experiences and background when writing the personal view annotation. Compare beliefs and opinions about the subject with those of the author. Consider similarities and differences in your and the author's opinions.

10. Inventive Annotation

Focusing on the conclusion of the text, draw upon your creativity to write a new and different ending the reading based on the authors' ideas.[28]

The variations of annotation above are the part of REAP strategy. It is an important aspect of REAP strategy to improve reading comprehension, because the students review what they read. In this strategy, the teacher can use one of the annotation based on the context. It means that, the using annotation should be fixed with the kinds of text, the students' level, or the situation which it takes places.

E. THE RELEVANT RESEARCH

1. The Effects of The REAP Reading Comprehension Technique on Students' Success by Mehmet Tasdemir (2010)

According to his findings, the students' learning success levels were significantly higher in the group in which REAP techniques were used, compared to the classical method group. Method research design was an experimental design based on pre-tests, post-tests, and the use of a control group was employed in the research of the groups chosen through random

[28] Learning Strategies Database. *Op.cit*, p. 73

sampling, one was nominated as the experimental group and the other was the control group. Two achievement tests were given to both groups, one prior to the experiment and the other following the experiment. Group equivalence was investigated in the pretest while the effectiveness of the methods applied was examined in the post-test.

The formulations of problems were:

a. Does the REAP technique create a significant difference in students' reading success compared to the classical teaching practice?
b. Is there a significant difference between groups using the classical method and the REAP technique?
c. What proportion of the students use which learning strategies in the process of using the REAP technique?

Additionally, in order to support the quantitative data obtained from the achievement test, study notes made by the students, and textbooks were examined for the purpose of identifying the way the students employed the reap technique. Participants the research group was composed of 59 students enrolled in a course on the principles and methods of teaching, of whom 29 were in the experimental group and 30 were the control group. Two equivalent groups (experimental and control) were formed on the basis of the midterm examination results of the course taught in two different classes by the researcher ($t = .516$; $p > .05$).

2. The Effect of Collaborative Strategic Reading toward The Second Year Students' Reading Comprehension Achievement at SLTP Negeri 20 Pekanbaru by Sri Wastuti (2005)

In her research, the method of research was experimental research that used pre-test and post-test design. She took two classes based on technique random sampling. She found that the mean score of experimental group which was taught by using collaborative strategic reading was 82,75 while the mean score of control group which was taught by using traditional reading classroom was 75,75. It means that there was significant effect between collaborative strategic reading for reading comprehension achievement and using traditional classroom method for reading comprehension achievement. Furthermore, t-test in this research was 3,5 and t-table was 2.00.

Based on the relevant researches above, REAP strategy had the effect on the students' learning. Therefore, the researcher conducted the research about the effect of using REAP strategy toward the reading comprehension of the first year student at State Islamic Senior High School Dumai.

F. THE OPERATIONAL CONCEPT

Operational concept is a concept that is used by the researcher as guidance to avoid misunderstanding. It should be interpreted into particular words in order to make it easy to measure. The following treatment as a

collection of procedures of the implementation of Read, Encode, Annotate and Ponder (REAP) strategy can be seen as the following:

1. Read
    a. The teacher asks the students to read a text, especially news item text. The students can start by using bottom-up technique or top down technique.
    b. The teacher asks the students to comprehend the text by identifying the aspects involving in the text.
    c. The teacher asks the students to catch the main idea of news item text.
2. Encode
    a. The teacher asks the students to translate the writer's word into the students' own words.
    b. The teacher asks the students to put their comprehending about the information in their mind.
3. Annotate
    a. The teacher introduces to the students several forms of annotations
    b. The teacher asks the students to response their comprehending by transferring in written form. Kinds of annotation can be chose based on the level of students. If desire, the students can work alone or in small group to make the annotation.

4. Ponder
    a. The teacher asks the students to ponder or reflect on the significance of the passage and their writing.
    b. The teacher asks the students to share what they have read and written to whole class.
    c. The teacher asks the students to discuss their work.
    d. The teacher evaluates what the students have done.

The indicators of discussion strategy that is used by the teacher in teaching reading in control class as following:

1. The teacher divides the students into small group. The teacher can choose their partner by the students themselves.
2. The teacher gives the text about news item text.
3. The teacher asks the students to read the text and asks to find the difficulty words. The students translate the difficulty words with their partner.
4. The teacher asks the students to comprehend the meaning of the text by ways:
    - The students identify the main idea, meaning of word and detail
    - The students answer the questions that relate to the text.
5. The teacher evaluates what the students do and correct the answer that the students do.

The indicators of variable Y as a dependent variable (the students' reading comprehension) are:

1. The students are able to identify news item text about the reading for meaning.
2. The students are able to find out about the factual information of news item text.
3. The students are able to find out the main idea of news item text.
4. The students are able to find out the meaning of word references or similar meaning.
5. The students are able to find out the communicative purpose of the reading text.

G. THE ASSUMPTION

The researcher assumes that using a strategy in teaching reading comprehension is able to improve the reading comprehension. The assumption is supported to the theory and the relevant research that stated the result of using REAP strategy had significant higher effect than without using REAP strategy.

H. THE HYPOTHESIS

Based on the assumption above, hypothesis of this study can be forwarded as follows:

1. The null hypothesis (h_o): there is no significant effect of Read, Encode, Annotate, and Ponder (REAP) Strategy toward Reading

Comprehension of the First Year Student at State Islamic Senior High School Dumai.

2. The alternative hypothesis (h_a): there is significant effect of Read, Encode, Annotate, and Ponder (REAP) Strategy toward Reading Comprehension of the First Year Student at State Islamic Senior High School Dumai.

CHAPTER III

RESEARCH METHODOLOGY

A. THE RESEARCH DESIGN

The type of this research was experimental research. Experimental research is the only type of the research that can test hypotheses to establish cause-and-effect relationship.[1] The design of this research was quasi-experiment design. According to Joy W. Creswell that quasi-experiments design are experimental situations in which the researcher assigns, but not randomly, participants to groups because the experimenter cannot artificially create groups for the experiment.[2] Therefore, the researcher used two classes as sample based on the cluster sampling. The first class was used as control class which was taught by using conventional strategy and another was used as an experimental class which was taught by using REAP strategy. The two classes got different treatment to measure the effect of using REAP strategy toward reading comprehension in news item reading text of the first year student at MAN Dumai. Both of the classes were given the same pre-test and post-test, but without giving the same treatment with the control class and the experimental class. It can be showed on the following table:

TABLE III.1

[1] L.R. Gay and Peter Airaisian, *Educational Research Competencies for Analysis and Application.* Six Ed. (New Jersey: Prentice-Hall, Inc., 2000), pp.36.

[2] John W. Creswell, *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research.* (New Jersey: Pearson Education Ltd., 2008), pp. 645.

THE RESEARCH DESIGN

Class	PRE-TEST	TREATMENT	POST-TEST
Experimental	T1	✓	T2
Control	T3	X	T4

Table **III.1** showed that the researcher only conducted the treatment in the experimental class and the researcher did not give the treatment in the control class, but two classes got the same pre-test and post-test. The effect of using REAP strategy toward reading comprehension in news item text of the first year student at State Islamic Senior High School Dumai is (T2-T1)-(T4-T3).[3]

B. TIME AND LOCATION OF THE RESEARCH

This research was conducted on April until May 2012 at State Islamic Senior High School Dumai.

C. OBJECT AND SUBJECT OF THE RESEARCH

The subject of this research was the first year student at State Islamic Senior High School Dumai in the academic year of 2011/2012. The object of this research was The Effect of Using Read, Encode, Annotate, and Ponder (REAP) Strategy toward Reading Comprehension in News Item Text.

D. POPULATION AND SAMPLE

[3] Prof. Dr. Sugiono. *Metode Penelitian Pendidikan.* (Bandung : Alfabeta, 2001), p. 116

1. Population

The population of this research was the first year students at State Islamic Senior High School Dumai. The total of the first year students were 154 students. The detail number of students included this following table:

TABEL III.2

THE TOTAL POPULATION OF STATE ISLAMIC SENIOR HIGH SCHOOL DUMAI

Class	Male	Female	Total
X Science	3	23	26
X Science 1	5	20	25
X Science 2	10	15	25
X Social	12	16	28
X Social 2	10	17	27
X Social 3	8	15	23
TOTAL	**48**	**106**	**154**

(Source: Document of MAN Dumai academic year 2011/2012)

Based on the table above, the total population was 154 students included class X Science, X Science 1, X Science 2, X Social, X Social 1, and X Social 2.

2. Sample

There were 6 classes as the total population in this research. Because the total population was big, the researcher took the sample by using cluster random sampling. According to Gay, Cluster Sampling randomly selects groups, not individuals. All the members of selected

groups have similar characteristics.[4] Therefore, the researcher took two classes to represent the population having similar characteristics.

The similar characteristics intended for the both of class are: the students were taught by the same teacher of English, the students had the same level, and the students had the same material about learning of reading. The first class was used as a control class and the second class was used as an experimental class.

E. THE TECHNIQUE OF THE DATA COLLECTION

In this research, the researcher used test to collect the data needed. Test was conducted in order to determine the students' reading comprehension. Test was given in the pre-test and post-test. To know the homogeneity of two variances, the researcher took pre-test. According to Punaji, pre-test is given to analyze the homogeneity variance.[5]

The researcher gave test in form of written form (multiple choice items) that related to reading comprehension. Before giving pre-test and post-test, the researcher gave try out to the students, did not include as sample in this research, to measure the validity and reliability of each items test. It can be seen on the appendix 3.

1. The Validity of The Test.

Before the instrumentation was given toward the sample of this research, it should be tried out to know the degree of validity of the

[4] L.R. Gay and Peter Airaisian. *Op.cit.*, p. 129

[5] Prof. Dr. H. Punaji Setyosari, M.Ed. *Metode Penelitian Pendidikan dan Pengembangan*. (Jakarta : Kencana Media, 2012). P.278

items. The researcher used Point Biserial Correlation analysis to analyze each of items. There were 20 items given to 21 students. The items were analyzed by using this formula:

$$rpbi = \frac{Mp - Mt}{SDt}\sqrt{\frac{p}{q}}$$

Note:

r_{pbi} : index of Point Biserial Correlation

M_p : Mean of the students who answered the correct score

M_t : Mean of total scores

SD_t : Standard Deviation

p : Proportion of the students who answered the correct scores

Based on the result (appendix 3), there were 17 valid items of 20 items. Therefore, the pre-test and post-test used 17 items that involved the indicators of reading comprehension.

TABLE III.3

THE SCORE ITEMS OF VALIDITY

No	Items Number	M_t	SD_t	M_p	r_{pbi}	Description
1	1	16.3	1.14	16.56	0047	Valid
2	2	16.3	1.14	16.64	0.453	Valid
3	3	16.3	1.14	16.56	0.456	Valid
4	4	16.3	1.14	16.12	-0.135	Invalid
5	5	16.3	1.14	16.56	0.456	Valid
6	6	16.3	1.14	16.62	0.560	Valid
7	7	16.3	1.14	16.50	0.525	Valid
8	8	16.3	1.14	16.52	0.576	Valid
9	9	16.3	1.14	16.62	0.560	Valid
10	10	16.3	1.14	16.50	0.525	Valid
11	11	16.3	1.14	16.47	0.447	Valid
12	12	16.3	1.14	16.07	-0.526	Invalid
13	13	16.3	1.14	16.5	0.525	Valid
14	14	16.3	1.14	15.93	-0.486	Invalid
15	15	16.3	1.14	16.5	0.525	Valid
16	16	16.3	1.14	16.47	0.447	Valid
17	17	16.3	1.14	16.47	0.447	Valid
18	18	16.3	1.14	16.47	0.456	Valid
19	19	16.3	1.14	16.56	0.525	Valid
20	20	16.3	1.14	16.62	0.560	Valid

The table above showed that the validity score was the score which had r_{pbi} higher than t_{table} at 5 % level significance (0,4333) and 1 % level significance (0,549).

2. The Reliability of The Test

Reliable instrumentation showed that there was a trustworthy or reliable of the test to take the data. In this research, the researcher used Kuder-Richardson formula to measure the reliability of test.

$$r_i = \frac{k}{(k-1)}\left\{\frac{St^2 - \sum piqi}{St^2}\right\}$$

Note:

k : total items

p_i : proportion the correct scores

q_i : 1-p_i

S_t^2 : total variances

F. THE DATA ANALYSIS TECHNIQUE

In order to find out whether there was a significant effect of using Read, Encode, Annotate, and Ponder (REAP) Strategy toward Reading Comprehension of the First Year Student at State Islamic Senior High School Dumai, the researcher used statistical parametric data technique.

The technique of the data analysis that was used in this research was Independent T-test formula. [6]

$$to = \frac{Mx - My}{\sqrt{\frac{S1^2}{n1} + \frac{S2^2}{n2}}}$$

Note:

M_x : Mean of the experimental class variable

M_y : Mean of the control class variable

SD_x : Standard error of mean of the experimental class

SD_y : Standard error of mean of the control class

N : The number of case.

[6] Prof. Dr. Sugiono. *Statistika untuk Penelitian.* (Bandung : Alfabeta, 2011), p. 138

The result of T-test formula was compared to t_{-table} to determine the significant level of score by using degree of freedom (df). The formula of degree of freedom:

$df = N_x+N_y-2$

Note:

d_f : the degree of freedom

N_x : the number of students in experimental class

N_y : the number of students in control class

If t_{-test} is higher than $t_{table,}$ the writer can conclude that h_a is accepted and h_o is rejected. It means that there is significant effect of using REAP strategy toward the students' reading comprehension. If t_{-test} is lower than $t_{table,}$ the writer can conclude that h_a is rejected and h_o is accepted. It means that there is no significant effect without using REAP strategy toward the reading comprehension in news item text at the first year student of MAN Dumai.

Before the researcher analyzed the data using statistical parametric, the data should be tested to know the homogeneity variance and the normal distribution data. The homogeny variance was analyzed by using F formula[7]:

$$F = \frac{The\ highest\ variance}{The\ lowest\ variance}$$

The normal distribution data was analyzed by using Chi Square formula. [8]

[7] *Ibid.*, p. 140
[8] *Ibid*, p. 79

$$X^2 = \sum_{i=1}^{K} \frac{(fo - fh)^2}{fh}$$

Note:

X_O : Chi Square

f_O : Obtained Frequency

f_h : Hoped Frequency

CHAPTER IV

THE DATA PRESENTATION AND THE DATA ANALYSIS

A. THE DATA PRESENTATION

There are two requirements of statistical parametric before analyzing the data. They are the data should be homogeny variances and the data should be normal distribution. In pre-test, the researcher analyzed the data to identify the homogeny variances between experimental class and control class.

TABLE IV.1

THE STUDENTS' SCORE OF PRE-TEST

IN EXPERIMENTAL CLASS

NO	X	f	Fx	Fx^2	x	x^2	fx^2
1	59	3	177	31329	-11.24	126.3376	379.0128
2	65	8	520	270400	-5.24	27.4576	219.6608
3	71	7	497	247009	0.76	0.5776	4.0432
4	76	4	304	92416	5.76	33.1776	132.7104
5	82	1	82	6724	11.76	138.2976	138.2976
6	88	2	176	30976	17.76	315.4176	630.8352
		N=25	**1756**	**678854**		**641.2656**	**1504.56**

$$Mx = \frac{1756}{25} = 70{,}24$$

$$SDx = \sqrt{\frac{\sum fx^2}{(n)}}$$

$$= \sqrt{\frac{1504{,}56}{(25)}} = \sqrt{60{,}182} = 7{,}75$$

$$S1^2 = \frac{\sum Fx^2}{(n)} = \frac{1504{,}56}{(25)} = 60.182$$

TABLE IV.2

THE STUDENTS' SCORE OF PRE-TEST

IN CONTROL CLASS

NO	Y	f	Fy	Fy^2	Y	y^2	fy^2
1	59	4	236	55696	-11.6	134.56	538.24
2	65	6	390	152100	-5.6	31.36	188.16
3	71	5	355	126025	0.4	0.16	0.8
4	76	7	532	283024	5.4	29.16	204.12
5	82	2	164	26896	11.4	129.96	259.92
6	88	1	88	7744	17.4	302.76	302.76
		N=25	**1765**	**651485**		**627.96**	**1494**

$$My = \frac{1765}{25} = 70.6$$

$$SDy = \sqrt{\frac{\sum fy^2}{(n)}}$$

$$= \sqrt{\frac{1494}{(25)}} = \sqrt{59.76} = 7.73$$

$$S2^2 = \frac{\sum Fy^2}{(n)} = \frac{1494}{(25)} = 59.76$$

From the result above, it could be seen that the highest variance was 60, 182 and the lowest variance was 59.76. To analyze the homogeneity of two variances, it could be done by using F formulation:

$$F = \frac{S1^2}{S2^2} = \frac{60,182}{59,76} = 1.007$$

By comparing F_o = (1.007) to F_{table} (dk for the highest variance = 25-1, and dk for the lowest variance = 25 -1) at 5% level=(1.98) and at 1 % level=(2.66), found that F_o was less than F_{table}.

The criteria of interpreting:

If : $F_o \geq F_{table,}$ it can be stated H_a was rejected. There is no the homogeneity variances.

If: $F_o \leq F_{table,}$ it can be stated H_o was accepted. There are the homogeneity variances.

In brief, the result could be showed on the following table:

TABLE IV.3
THE HOMOGENEITY OF PRE-TEST

Sample Varian	**Variables**		$F_{obtained}$	F_{table}	
				5%	**1%**
	Experimental	**Control**	1.007	1.96	2.66
S^2	60.182	59.76			
N	25	25			

Based on the result, $F_{hitung} \leq F_{tabel}$ (1.96 > 1.007 < 2.66). It meant that the variances were homogeny variances.

The others requirement of statistical parametric is the data should have normal data. Therefore, the score of post-test got would be analyzed by using Chi-square formula to identify the normality of the data. The following table was the calculating of the normality of the data.

TABLE IV.4
DISTRIBUTION OF THE DATA IN EXPERIMENTAL CLASS

Interval Class	f	Xi	X´	Fx´	Fx´²	fXi
84 - 89	3	86.5	2	6	36	259.5
78 - 83	7	80.5	1	7	49	563.5
72 - 77	6	74.5	0	0	0	447
66 - 71	6	68.5	-1	-6	36	411
60 - 65	3	62.5	-2	-6	36	187.5
	25			1	157	1868.5

TABLE IV.5

THE NORMALITY DATA TESTING IN EXPERIMENTAL CLASS

No	Class	Z-Score	The score 0-z	The Score of Class	Fe	Fo	Fe-Fo	$\frac{(Fo-fe)^2}{fe}$
1	89.5	1.18	0.3810	0.123	3.075	3	-0.075	0.00182
2	83.5	0.70	0.2580	0.1709	4.2725	7	2.7275	1.74119
3	77.5	0.22	0.0871	0.1858	4.6465	6	1.355	0.39526
4	71.5	-0.25	0.0987	0.1562	3.905	6	2.095	1.12395
5	65.5	-0.69	0.2549	0.1159	2.8975	3	0.1025	0.003625
6	60.5	-1.13	0.3708					
						∑fo =25		$\sum\frac{(Fo-fe)^2}{fe}$ = 3.2658

The way to find out the normality of data used Chi Square formula:

1. Determine the high score and the low score

   The high score : 89

   The low score : 60

2. Determine the range :

R = 89 – 60 = 29

3. Determine the total of class :

Class = 1 + 3,3 log n

= 1 + 3,3 (log 25)

= 1 + 3,3 (1,39)

= 1 + 4,5 = 5,5 = 6

4. Determine (i)

$$\frac{i}{R} = \frac{29}{6} = 4{,}8 = 5$$

5. $\mathbf{Mx} = \frac{\sum FXi}{25} = \frac{1868{,}5}{25} = 74{,}72$

$$Sdx = i\sqrt{\frac{Fx'^2}{N} - \left(\frac{fx}{N}\right)^2}$$

$$Sdx = 5\sqrt{\frac{157}{25} - \left(\frac{1}{25}\right)^2}$$

$$Sdx = 5\sqrt{6{,}28 - 0{,}0016} = 5\sqrt{6{,}2784}$$

= 5 (2,5056) = 12, 528 = 12,5

6. $Z = \frac{class - \bar{X}}{Sdx}$

$$Z1 = \frac{89{,}5 - 74{,}72}{12{,}5} = 1{,}18$$

$$Z2 = \frac{83{,}5 - 74{,}72}{12{,}5} = 0{,}70$$

$$Z3 = \frac{77{,}5 - 74{,}72}{12{,}5} = 0{,}222$$

$$Z4 = \frac{71{,}5 - 74{,}72}{12{,}5} = -0{,}25$$

$$Z5 = \frac{65{,}5 - 74{,}72}{12{,}5} = -0{,}696$$

$$Z6 = \frac{60,5 - 74,72}{12,5} = -1,13$$

The class wide :

0. 3810 – 0.2580 = 0.123 0.2549 – 0.0987 = 0.1562

0. 2580 – 0.0871 = 0.1709 0.3708 – 0.2549 = 0.1159

0.0871 + 0.0987 = 0.1858

Fe :

0.123 x 25 = 3.075 0.1562 x 25 = 3.905

0. 1709 x 25 = 4. 2725 0.1159 x 25 = 2.8975

0.1858 x 25 = 4. 6465

Chi Square :

$$X = \sum \frac{(Fo - Fe)^2}{Fe}$$

$$= \frac{(3 - 3,075)^2}{3,075} + \frac{(7 - 4,2725)^2}{4,2725} + \frac{(6 - 4,645)^2}{4,645} + \frac{(6 - 3,905)^2}{3,905} + \frac{(3 - 2,8975)^2}{2,8975}$$

$$X = 0,00182 + 1,74119 + 0,39526 + 1,12395 + 0,003625 = 3,2658$$

Dk = 5 -1 = 4

X was compared to X_{table} at 5 % significant level 9,488 and at 1% significant level 13, 277. The interpretation of criteria :

1. If $X \geq X_{table,}$ it means that there is no the normal data
2. If $X \leq X_{table,}$ it means that there is the normal data

Conclusion :

Based on the result (9,488 > 3,2658 < 13,277) it means that there is the normal data.

TABLE IV.6

DISTRIBUTION OF THE DATA IN CONTROL CLASS

Interval Class	f	Yi	Y´	Fy´	Fy´²	fYi
84 - 89	2	86.5	3	6	36	173
78 - 83	5	80.5	2	10	100	402.5
72 - 77	5	74.5	1	5	25	372.5
66 - 71	8	68.5	0	0	0	548
60 - 65	4	62.5	-1	-4	16	250
54- 59	1	56.5	-2	-2	4	56.5
	25			15	181	1802.5

TABLE IV.7

THE NORMALITY DATA TESTING IN CONTROL CLASS

No	Class	Z-Score	The score 0-z	The Score of Class	Fe	Fo	Fe-Fo	$\frac{(Fo-fe)^2}{fe}$
1	89.5	1.328	0.4060	0.0988	2.47	2	-0.47	0.0894
2	83.5	0.87	0.3078	0.1487	3.7175	5	1.2825	0.4424
3	77.5	0.413	0.1591	0.1751	4.3775	5	0.6225	0.08852
4	71.5	-0.04	0.0160	0.1755	4.3875	8	3.6125	2.9743
5	65.5	-0.50	0.1915	0.1374	3.435	4	0.565	0.0929
6	59.5	-0.959	0.3289	0.081	2.025	1	-1.025	0.5188
7	54.5	-1.34	0.4099					
						∑fo =25		$\sum\frac{(Fo-fe)^2}{fe}$ = 4.20632

The way to find out the normality of data used Chi Square formula:

1. Determine the high score and the low score

   The high score : 89

   The low score : 54

2. Determine the range :

   R = 89 – 54 = 35

3. Determine the total of class :

   Class = 1 + 3,3 log n

   = 1 + 3,3 (log 25)

   = 1 + 3,3 (1,39)

   = 1 + 4,5 = 5,5 = 6

4. Determine (i)

$$\frac{i}{R} = \frac{35}{6} = 5{,}8 = 6$$

5. $\mathbf{My} = \frac{\sum Fyi}{25} = \frac{18025}{25} = 72{,}1$

$$Sdy = i\sqrt{\frac{Fy'^2}{N} - \left(\frac{fy}{N}\right)^2}$$

$$Sdy = 5\sqrt{\frac{181}{25} - \left(\frac{15}{25}\right)^2}$$

$$Sdy = 5\sqrt{7{,}24 - 0{,}36} = 5\sqrt{6{,}88} = 5\,(2{,}622) = 13{,}11$$

6. $Z = \frac{class - My}{Sdy}$

$$Z1 = \frac{89,5 - 72,71}{13,11} = 1,328$$

$$Z2 = \frac{83,5 - 72,71}{13,11} = 0,87$$

$$Z3 = \frac{77,5 - 72,71}{13,11} = 0,413$$

$$Z4 = \frac{71,5 - 72,71}{13,11} = -0,04$$

$$Z5 = \frac{65,5 - 72,71}{13,11} = -0,50$$

$$Z6 = \frac{59,5 - 72,71}{13,11} = -1,34$$

The Class wide :

0. 4066 – 0.3078 = 0.0988

0. 3078 – 0.1591 = 0.1487

0.1591 + 0. 0160 = 0.1751

0.1915 – 0.0160 = 0.1755

0.3289 – 0.1915 = 0.1374

0.4099 – 0.3289 = 0.081

Fe :

0.0988 x 25 = 2.47

0.1487 x 25 = 3.7175

0.1751 x 25 = 4.3775

0.1755 x 25 = 4.3875

0.1374 x 25 = 3.435

0.081 x 25 = 2.025

Chi Square :

$$X = \sum \frac{(Fo - Fe)^2}{Fe}$$

$$= \frac{(2-2,47)^2}{2,47} + \frac{(5-3,7175)^2}{3,7175} + \frac{(5-4,3775)^2}{4,3775} + \frac{(8-4,3875)^2}{4,3875} + \frac{(4-3,435)^2}{3,435}$$

$$X = 0,0894 + 0,4424 + 0,08852 + 2,9743 + 0,0929 + 0,5188 = 4,20632$$

Dk = 6 -1 = 4

X was compared to X_{table} at 5 % significant level 11,070 and at 1% significant level 15,086. The interpretation of criteria:

1. If $X \geq X_{table,}$ it means that there is no the normal data
2. If $X \leq X_{table,}$ it means that there is the normal data

Conclusion :

Based on the result (11.070 > 4.20632 < 15.086) it means that there is the normal data.

In briefly, the result of homogeneity of the data can be showed in the following table:

TABLE IV.8

THE NORMALITY OF DATA TEST

Class	$X^2_{Obtained}$	X^2_{table}		**Criteria**
		5%	**1%**	
Experiment	3.2658	9.488	13.27	Normal
Control	4.20632	9.488	13.27	Normal

From the calculating above, it can be showed that the data in this research are homogeny data. The two scores of $X^2_{Obtained}$ were compared to X^2_{table} at 5% significant level (9.488) and 1 % significant level (13.27). Based on the X^2_{table} , it showed that $X^2_{Obtained}$ in experimental class (**3.2658**) was lower than X^2_{table} and $X^2_{Obtained}$ in control class (**4.20632**) was lower than $X^2_{table.}$

It meant that two classes had distribution normal data (9.488 > **3.2658** < 13.27) and (9.488 > **4.2063** < 13.27).

After getting homogeny data and distribution normal data, independent t_{test} analysis data can be used to analyze data in this research.

The following table was the result of calculating data for the experimental class and control class.

TABLE IV.9

THE RESULT OF THE TEST FOR THE EXPERIMENTAL CLASS AND THE CONTROL CLASS

Categorize	Experimental class		Control Class	
	Before	After	Before	After
Total Score	1756	1948	1765	1823
Mean	70.24	76.6	70,6	73.44
Standard Deviation	7.75	6.92	7.73	9.23
Variance	60.182	47.982	59.76	85.26
Range	29	23	29	29
N	25	25	25	25

From the table above, it could be seen that the mean score of experimental class before applying REAP strategy was **70.24** and the mean score of experimental class after applying REAP strategy was **76.6** It meant that the experimental class after applying REAP strategy was higher than before applying REAP strategy.

B. THE DATA ANALYSIS

The effect of using REAP strategy could be measured by using pre-test and post-test design. The data analysis used statistical parametric, that was independent t-test.

1. Experimental Class

TABLE IV.10

THE STUDENTS' SCORE OF PRE-TEST IN EXPERIMENTAL CLASS

NO	X	f	Fx	Fx^2	x	x^2	fx^2
1	59	3	177	31329	-11.24	126.3376	379.0128
2	65	8	520	270400	-5.24	27.4576	219.6608
3	71	7	497	247009	0.76	0.5776	4.0432
4	76	4	304	92416	5.76	33.1776	132.7104
5	82	1	82	6724	11.76	138.2976	138.2976
6	88	2	176	30976	17.76	315.4176	630.8352
		N=25	**1756**	**678854**		**641.2656**	**1504.56**

$$Mx = \frac{1756}{25} = 70{,}24$$

$$SDx = \sqrt{\frac{\sum fx^2}{(n)}}$$

$$= \sqrt{\frac{1504{,}56}{(25)}} = \sqrt{60{,}182} = 7{,}75$$

$$S1^2 = \frac{\sum Fx^2}{(n)} = \frac{1504,56}{(25)} = 60.182$$

Based on the calculating of pre-test in experimental class, mean found was 70,24, standard deviation was 7,75 and variance was 60, 182.

TABLE IV.11

THE STUDENTS' SCORE OF POST-TEST IN EXPERIMENTAL CLASS

NO	X	f	FX	FX²	x	x²	fx²
1	65	3	195	38025	-10.92	119.2464	357.7392
2	71	6	426	181476	-4.92	24.2064	145.2384
3	76	6	456	207936	0.08	0.0064	0.0384
4	82	7	574	329476	6.08	36.9664	258.7648
5	88	3	264	69696	12.08	145.9264	437.7792
	N=25	**25**	**1915**	**826609**		**326.352**	**1199.56**

$$Mx = \frac{1915}{25} = 76,6$$

$$SDx = \sqrt{\frac{\sum fx^2}{(n)}}$$

$$= \sqrt{\frac{1199.56}{(25)}} = \sqrt{47.982} = 6.92$$

$$S1^2 = \frac{\sum Fx^2}{(n)} = \frac{1199.56}{(25)} = 47.982$$

Based on the calculating of pre-test in control class, mean found was 76.6, standard deviation was 6.92 and variance was 47.982.

2. Control Class

TABLE IV.12

THE STUDENTS' SCORE OF PRE-TEST IN CONTROL CLASS

NO	Y	f	Fy	Fy^2	Y	y^2	fy^2
1	59	4	236	55696	-11.6	134.56	538.24
2	65	6	390	152100	-5.6	31.36	188.16
3	71	5	355	126025	0.4	0.16	0.8
4	76	7	532	283024	5.4	29.16	204.12
5	82	2	164	26896	11.4	129.96	259.92
6	88	1	88	7744	17.4	302.76	302.76
		N=25	**1765**	**651485**		**627.96**	**1494**

$$My = \frac{1765}{25} = 70{,}6$$

$$SDy = \sqrt{\frac{\sum fy^2}{(n)}}$$

$$= \sqrt{\frac{1494}{(25)}} = \sqrt{59.76} = 7{,}73$$

$$S2^2 = \frac{\sum Fy^2}{(n)} = \frac{1494}{(25)} = 59.76$$

TABLE IV. 13

THE STUDENTS' SCORE OF POST-TEST IN CONTROL CLASS

NO	Y	f	Fy	Fy^2	Y	y^2	fy^2
1	59	1	59	3481	-9.24	85.3776	85.3776
2	65	4	260	67600	-3.24	10.4976	41.9904
3	71	8	568	322624	2.76	7.6176	60.9408
4	76	5	380	144400	7.76	60.2176	301.088
5	82	5	410	168100	13.76	189.3376	946.688
6	88	2	176	30976	19.76	390.4576	780.9152
		25	**1794**	**733700**		**658.128**	**2131.622**

$$My = \frac{1794}{25} = 71{,}76$$

$$SDy = \sqrt{\frac{\sum fy^2}{(n)}}$$

$$= \sqrt{\frac{2131.622}{(25)}} = \sqrt{85.26} = 9.23$$

$$S2^2 = \frac{\sum Fy^2}{(n)} = \frac{2131.622}{(25)} = 85.26$$

To find out the ability of the first year students at State Islamic Senior High School Dumai in comprehending news item reading text without using Read, Encode, Annotate, and Ponder (REAP) strategy and by using Read, Encode, Annotate, and Ponder (REAP) strategy, the data was analyzed by using independent t-test formula.

$$to = \frac{Mx - My}{\sqrt{\frac{S1^2}{n1} + \frac{S2^2}{n2}}}$$

TABLE IV.14
THE STUDENTS' GAIN POST-TEST SCORE
IN EXPERIMENTAL CLASS

NO	X POST TEST	NO	X PRETEST	X	x	x^2
1	71	1	71	0	-6.36	40.4496
2	82	2	76	6	-0.36	0.1296
3	76	3	65	11	4.64	21.5296
4	65	4	59	6	-0.36	0.1296
5	88	5	88	0	-6.36	40.4496
6	82	6	76	6	-0.36	0.1296
7	71	7	65	6	-0.36	0.1296
8	76	8	65	11	4.64	21.5296
9	82	9	71	11	4.64	21.5296
10	82	10	76	6	-0.36	0.1296
11	71	11	65	6	-0.36	0.1296
12	76	12	65	11	4.64	21.5296
13	76	13	71	5	-1.36	1.8496
14	76	14	71	5	-1.36	1.8496
15	71	15	65	6	-0.36	0.1296
16	65	16	59	6	-0.36	0.1296
17	82	17	65	17	10.64	113.2096
18	88	18	82	6	-0.36	0.1296
19	71	19	65	6	-0.36	0.1296
20	82	20	76	6	-0.36	0.1296
21	71	21	71	0	-6.36	40.4496
22	82	22	71	11	4.64	21.5296
23	76	23	71	5	-1.36	1.8496
24	65	24	59	6	-0.36	0.1296
25	88	25	88	0	-0.36	0.1296
	1915		**1756**	**159**		**349.44**

$$Mx = \frac{159}{25} = 6.36$$

$$SDx = \sqrt{\frac{\sum x^2}{(n)}}$$

$$= \sqrt{\frac{349.44}{(25)}} = \sqrt{13.97} = 3.73$$

$$S1^2 = \frac{\sum x^1}{(n)} = \frac{349.44}{(25)} = 13.97$$

TABLE IV. 15
THE STUDENTS' GAIN POST-TEST SCORE
IN CONTROL CLASS

NO	Y	NO	Y	Y	y	y^2
1	71	1	65	6	3.16	9.9856
2	82	2	76	6	3.16	9.9856
3	76	3	76	0	-2.82	7.9524
4	88	4	82	6	3.16	9.9856
5	82	5	76	6	3.16	9.9856
6	71	6	65	6	3.16	9.9856
7	65	7	59	6	3.16	9.9856
8	76	8	71	5	2.16	4.6656
9	82	9	76	6	3.16	9.9856
10	71	10	65	6	3.16	9.9856
11	88	11	88	0	-2.82	7.9524
12	76	12	76	0	-2.82	7.9524
13	71	13	71	0	-2.82	7.9524
14	65	14	59	6	3.16	9.9856
15	71	15	71	0	-2.82	7.9524
16	65	16	65	0	-2.82	7.9524
17	71	17	71	0	-2.82	7.9524
18	76	18	76	0	-2.82	7.9524
19	82	19	82	0	-2.82	7.9524
20	76	20	76	0	-2.82	7.9524
21	65	21	65	0	-2.82	7.9524
22	65	22	65	0	-2.82	7.9524
23	59	23	59	0	-2.82	7.9524
24	71	24	71	0	-2.82	7.9524
25	71	25	59	12	9.16	83.9056
	1836		**1765**	**71**		**289.7752**

$$My = \frac{71}{25} = 2.84$$

$$SDy = \sqrt{\frac{\sum y^2}{(n)}}$$

$$= \sqrt{\frac{289.7752}{(25)}} = \sqrt{11.59} = 3.40$$

$$S2^2 = \frac{\sum y^2}{(n)} = \frac{289.7752}{(25)} = 11.59$$

After the calculating of the mean, the standard variance, and the variance got toward the gain, it should be input to t-test formula:

$$to = \frac{Mx - My}{\sqrt{\frac{S1^2}{n1} + \frac{S2^2}{n2}}}$$

$$to = \frac{6.36 - 2.84}{\sqrt{\frac{13,97}{25} + \frac{11.59}{25}}}$$

$$to = \frac{3.52}{\sqrt{0,5588 + 0,4636}}$$

$$to = \frac{3.52}{\sqrt{1,0024}} = \frac{3.52}{1,011} = 3.481$$

$$df = n1 + n2$$

$$df = 25 + 25 - 2 = 48$$

Based on the result above, it was interpreted by comparing t_o and t_{table}. df= 25+25-2=48 (there is no df 48, therefore it used df 50). From the t_{table}, at 5% significant level (2,01) and at 1% significant level (2,68) found that t_o was higher than t_{table} (2,01 < 3.481 > 2,68).

The interpretation of testing criteria:

1. If : $T_o > T_{table}$, The alternative hypothesis (h_a) is accepted. It means that: there is significant effect of using Read, Encode, Annotate, and Ponder (REAP) Strategy toward Reading Comprehension of the First Year Student at State Islamic Senior High School Dumai.
2. If : $T_o \leq T_{table}$, the null hypothesis (h_o) is rejected. It means that there is no significant effect of using Read, Encode, Annotate, and Ponder (REAP) Strategy toward Reading Comprehension of the First Year Student at State Islamic Senior High School Dumai.

In conclusion, H_o was rejected and H_a was accepted (2.01 < 3.481 > 2.68). It means that there is significant effect of using REAP strategy toward the reading comprehension of the first year student at State Islamic Senior High School Dumai.

To identify the level of the effect of using REAP strategy toward the reading comprehension of the first year, it was done by calculating coefficient (r^2) by using the following formula:

$$r^2 = \frac{t^2}{t^2 + n - 2}$$

$$r^2 = \frac{3.481^2}{3.481^2 + 50 - 2}$$

$$r^2 = \frac{12.117361}{60.117361}$$

$$r^2 = 0.20156$$

To find out the percentage of coefficient effect (K_p), it used the following formula:

$$K_p = r^2 \times 100\%$$

$$K_p = 0{,}20156 \times 100\%$$

$$K_p = 20{,}15\%$$

Based on the analysis data about the students ability in comprehending news item text, it showed that mean of the students' ability in comprehending news item by using REAP strategy was higher than mean of the students' ability in comprehending news item by using discussion strategy. The differences treatment of two classes taught to the homogeny students were effected the differences students' scores in comprehending news item text.

Therefore, the result of this analysis could answer the formulation of the problem:

1. The students' ability of the first year students at State Islamic Senior High School Dumai in comprehending news item reading text by using discussion strategy had lower score. It was effected by different treatment used in teaching learning process.
2. The students' ability of the first year students at State Islamic Senior High School Dumai in comprehending news item reading text by using Read, Encode, Annotate, and Ponder (REAP) had higher score.

3. There is significant effect of using Read, Encode, Annotate, and Ponder (REAP) strategy in comprehending news item reading text of the first year students at State Islamic Senior High School Dumai.

CHAPTER IV

THE DATA PRESENTATION AND THE DATA ANALYSIS

A. THE DATA PRESENTATION

There are two requirements of statistical parametric before analyzing the data. They are the data should be homogeny variances and the data should be normal distribution. In pre-test, the researcher analyzed the data to identify the homogeny variances between experimental class and control class.

TABLE IV.1
THE STUDENTS' SCORE OF PRE-TEST
IN EXPERIMENTAL CLASS

NO	X	f	Fx	Fx^2	x	x^2	fx^2
1	59	3	177	31329	-11.24	126.3376	379.0128
2	65	8	520	270400	-5.24	27.4576	219.6608
3	71	7	497	247009	0.76	0.5776	4.0432
4	76	4	304	92416	5.76	33.1776	132.7104
5	82	1	82	6724	11.76	138.2976	138.2976
6	88	2	176	30976	17.76	315.4176	630.8352
		N=25	**1756**	**678854**		**641.2656**	**1504.56**

$$Mx = \frac{1756}{25} = 70{,}24$$

$$SDx = \sqrt{\frac{\sum fx^2}{(n)}}$$

$$= \sqrt{\frac{1504{,}56}{(25)}} = \sqrt{60{,}182} = 7{,}75$$

$$S1^2 = \frac{\sum Fx^2}{(n)} = \frac{1504{,}56}{(25)} = 60{.}182$$

TABLE IV.2

THE STUDENTS' SCORE OF PRE-TEST

IN CONTROL CLASS

NO	Y	f	Fy	Fy^2	Y	y^2	fy^2
1	59	4	236	55696	-11.6	134.56	538.24
2	65	6	390	152100	-5.6	31.36	188.16
3	71	5	355	126025	0.4	0.16	0.8
4	76	7	532	283024	5.4	29.16	204.12
5	82	2	164	26896	11.4	129.96	259.92
6	88	1	88	7744	17.4	302.76	302.76
		N=25	**1765**	**651485**		**627.96**	**1494**

$$My = \frac{1765}{25} = 70.6$$

$$SDy = \sqrt{\frac{\sum fy^2}{(n)}}$$

$$= \sqrt{\frac{1494}{(25)}} = \sqrt{59.76} = 7.73$$

$$S2^2 = \frac{\sum Fy^2}{(n)} = \frac{1494}{(25)} = 59.76$$

From the result above, it could be seen that the highest variance was 60, 182 and the lowest variance was 59.76. To analyze the homogeneity of two variances, it could be done by using F formulation:

$$F = \frac{S1^2}{S2^2} = \frac{60,182}{59,76} = 1.007$$

By comparing F_o = (1.007) to F_{table} (dk for the highest variance = 25-1, and dk for the lowest variance = 25 -1) at 5% level=(1.98) and at 1 % level=(2.66), found that F_o was less than F_{table}.

The criteria of interpreting:

If : $F_o \geq F_{table,}$ it can be stated H_a was rejected. There is no the homogeneity variances.

If: $F_o \leq F_{table,}$ it can be stated H_o was accepted. There are the homogeneity variances.

In brief, the result could be showed on the following table:

TABLE IV.3
THE HOMOGENEITY OF PRE-TEST

Sample Varian	**Variables**		$F_{obtained}$	F_{table}	
				5%	**1%**
	Experimental	**Control**	1.007	1.96	2.66
S^2	60.182	59.76			
N	25	25			

Based on the result, $F_{hitung} \leq F_{tabel}$ (1.96 > 1.007 < 2.66). It meant that the variances were homogeny variances.

The others requirement of statistical parametric is the data should have normal data. Therefore, the score of post-test got would be analyzed by using Chi-square formula to identify the normality of the data. The following table was the calculating of the normality of the data.

TABLE IV.4

DISTRIBUTION OF THE DATA IN EXPERIMENTAL CLASS

Interval Class	f	Xi	X´	Fx´	Fx´²	fXi
84 - 89	3	86.5	2	6	36	259.5
78 - 83	7	80.5	1	7	49	563.5
72 - 77	6	74.5	0	0	0	447
66 - 71	6	68.5	-1	-6	36	411
60 - 65	3	62.5	-2	-6	36	187.5
	25			1	157	1868.5

TABLE IV.5

THE NORMALITY DATA TESTING IN EXPERIMENTAL CLASS

No	Class	Z-Score	The score 0-z	The Score of Class	Fe	Fo	Fe-Fo	$\frac{(Fo-fe)^2}{fe}$
1	89.5	1.18	0.3810	0.123	3.075	3	-0.075	0.00182
2	83.5	0.70	0.2580	0.1709	4.2725	7	2.7275	1.74119
3	77.5	0.22	0.0871	0.1858	4.6465	6	1.355	0.39526
4	71.5	-0.25	0.0987	0.1562	3.905	6	2.095	1.12395
5	65.5	-0.69	0.2549	0.1159	2.8975	3	0.1025	0.003625
6	60.5	-1.13	0.3708					
						∑fo =25		$\sum\frac{(Fo-fe)^2}{fe}$ = 3.2658

The way to find out the normality of data used Chi Square formula:

1. Determine the high score and the low score

   The high score : 89

   The low score : 60

2. Determine the range :

   R = 89 – 60 = 29

3. Determine the total of class :

   Class = 1 + 3,3 log n

   = 1 + 3,3 (log 25)

   = 1 + 3,3 (1,39)

   = 1 + 4,5 = 5,5 = 6

4. Determine (i)

$$\frac{i}{R} = \frac{29}{6} = 4{,}8 = 5$$

5. $\mathbf{Mx} = \frac{\sum FXi}{25} = \frac{1868{,}5}{25} = 74{,}72$

$$Sdx = i\sqrt{\frac{Fx'^2}{N} - \left(\frac{fx}{N}\right)^2}$$

$$Sdx = 5\sqrt{\frac{157}{25} - \left(\frac{1}{25}\right)^2}$$

$$Sdx = 5\sqrt{6{,}28 - 0{,}0016} = 5\sqrt{6{,}2784}$$

= 5 (2,5056) = 12, 528 = 12,5

6. $Z = \frac{class - \bar{X}}{Sdx}$

$$Z1 = \frac{89{,}5 - 74{,}72}{12{,}5} = 1{,}18$$

$$Z2 = \frac{83{,}5 - 74{,}72}{12{,}5} = 0{,}70$$

$$Z3 = \frac{77{,}5 - 74{,}72}{12{,}5} = 0{,}222$$

$$Z4 = \frac{71{,}5 - 74{,}72}{12{,}5} = -0{,}25$$

$$Z5 = \frac{65,5 - 74,72}{12,5} = -0,696$$

$$Z6 = \frac{60,5 - 74,72}{12,5} = -1,13$$

The class wide :

0. 3810 – 0.2580 = 0.123 0.2549 – 0.0987 = 0.1562

0. 2580 – 0.0871 = 0.1709 0.3708 – 0.2549 = 0.1159

0.0871 + 0.0987 = 0.1858

Fe :

0.123 x 25 = 3.075 0.1562 x 25 = 3.905

0. 1709 x 25 = 4. 2725 0.1159 x 25 = 2.8975

0.1858 x 25 = 4. 6465

Chi Square :

$$X = \sum \frac{(Fo - Fe)^2}{Fe}$$

$$= \frac{(3 - 3,075)^2}{3,075} + \frac{(7 - 4,2725)^2}{4,2725} + \frac{(6 - 4,645)^2}{4,645} + \frac{(6 - 3,905)^2}{3,905} + \frac{(3 - 2,8975)^2}{2,8975}$$

$$X = 0,00182 + 1,74119 + 0,39526 + 1,12395 + 0,003625 = 3,2658$$

Dk = 5 -1 = 4

X was compared to X_{table} at 5 % significant level 9,488 and at 1% significant level 13, 277. The interpretation of criteria :

1. If $X \geq X_{table,}$ it means that there is no the normal data
2. If $X \leq X_{table,}$ it means that there is the normal data

Conclusion :

Based on the result (9,488 > 3,2658 < 13,277) it means that there is the normal data.

TABLE IV.6

DISTRIBUTION OF THE DATA IN CONTROL CLASS

Interval Class	f	Yi	Y´	Fy´	Fy´²	fYi
84 - 89	2	86.5	3	6	36	173
78 - 83	5	80.5	2	10	100	402.5
72 - 77	5	74.5	1	5	25	372.5
66 - 71	8	68.5	0	0	0	548
60 - 65	4	62.5	-1	-4	16	250
54- 59	1	56.5	-2	-2	4	56.5
	25			15	181	1802.5

TABLE IV.7

THE NORMALITY DATA TESTING IN CONTROL CLASS

No	Class	Z-Score	The score 0-z	The Score of Class	Fe	Fo	Fe-Fo	$\frac{(Fo-fe)^2}{fe}$
1	89.5	1.328	0.4060	0.0988	2.47	2	-0.47	0.0894
2	83.5	0.87	0.3078	0.1487	3.7175	5	1.2825	0.4424
3	77.5	0.413	0.1591	0.1751	4.3775	5	0.6225	0.08852
4	71.5	-0.04	0.0160	0.1755	4.3875	8	3.6125	2.9743
5	65.5	-0.50	0.1915	0.1374	3.435	4	0.565	0.0929
6	59.5	-0.959	0.3289	0.081	2.025	1	-1.025	0.5188
7	54.5	-1.34	0.4099					
						∑fo =25		$\sum\frac{(Fo-fe)^2}{fe}$ = 4.20632

The way to find out the normality of data used Chi Square formula:

1. Determine the high score and the low score

   The high score : 89

   The low score : 54

2. Determine the range :

   R = 89 – 54 = 35

3. Determine the total of class :

   Class = 1 + 3,3 log n

   = 1 + 3,3 (log 25)

   = 1 + 3,3 (1,39)

   = 1 + 4,5 = 5,5 = 6

4. Determine (i)

$$\frac{i}{R} = \frac{35}{6} = 5{,}8 = 6$$

5. $\mathbf{My} = \frac{\sum Fyi}{25} = \frac{18025}{25} = 72{,}1$

$$Sdy = i\sqrt{\frac{Fy'^2}{N} - \left(\frac{fy}{N}\right)^2}$$

$$Sdy = 5\sqrt{\frac{181}{25} - \left(\frac{15}{25}\right)^2}$$

$$Sdy = 5\sqrt{7{,}24 - 0{,}36} = 5\sqrt{6{,}88} = 5\,(2{,}622) = 13{,}11$$

6. $Z = \frac{class - My}{Sdy}$

$$Z1 = \frac{89,5 - 72,71}{13,11} = 1,328$$

$$Z2 = \frac{83,5 - 72,71}{13,11} = 0,87$$

$$Z3 = \frac{77,5 - 72,71}{13,11} = 0,413$$

$$Z4 = \frac{71,5 - 72,71}{13,11} = -0,04$$

$$Z5 = \frac{65,5 - 72,71}{13,11} = -0,50$$

$$Z6 = \frac{59,5 - 72,71}{13,11} = -1,34$$

The Class wide :

0. 4066 – 0.3078 = 0.0988

0. 3078 – 0.1591 = 0.1487

0.1591 + 0. 0160 = 0.1751

0.1915 – 0.0160 = 0.1755

0.3289 – 0.1915 = 0.1374

0.4099 – 0.3289 = 0.081

Fe :

0.0988 x 25 = 2.47

0.1487 x 25 = 3.7175

0.1751 x 25 = 4.3775

0.1755 x 25 = 4.3875

0.1374 x 25 = 3.435

0.081 x 25 = 2.025

Chi Square :

$$X = \sum \frac{(Fo - Fe)^2}{Fe}$$

$$= \frac{(2-2,47)^2}{2,47} + \frac{(5-3,7175)^2}{3,7175} + \frac{(5-4,3775)^2}{4,3775} + \frac{(8-4,3875)^2}{4,3875} + \frac{(4-3,435)^2}{3,435}$$

$$X = 0,0894 + 0,4424 + 0,08852 + 2,9743 + 0,0929 + 0,5188 = 4,20632$$

Dk = 6 -1 = 4

X was compared to X_{table} at 5 % significant level 11,070 and at 1% significant level 15,086. The interpretation of criteria:

1. If $X \geq X_{table,}$ it means that there is no the normal data
2. If $X \leq X_{table,}$ it means that there is the normal data

Conclusion :

Based on the result (11.070 > 4.20632 < 15.086) it means that there is the normal data.

In briefly, the result of homogeneity of the data can be showed in the following table:

TABLE IV.8

THE NORMALITY OF DATA TEST

Class	$X^2_{Obtained}$	X^2_{table}		**Criteria**
		5%	**1%**	
Experiment	3.2658	9.488	13.27	Normal
Control	4.20632	9.488	13.27	Normal

From the calculating above, it can be showed that the data in this research are homogeny data. The two scores of $X^2_{Obtained}$ were compared to X^2_{table} at 5% significant level (9.488) and 1 % significant level (13.27). Based on the X^2_{table} , it showed that $X^2_{Obtained}$ in experimental class (**3.2658**) was lower than X^2_{table} and $X^2_{Obtained}$ in control class (**4.20632**) was lower than $X^2_{table.}$

It meant that two classes had distribution normal data (9.488 > **3.2658** < 13.27) and (9.488 > **4.2063** < 13.27).

After getting homogeny data and distribution normal data, independent t_{test} analysis data can be used to analyze data in this research.

The following table was the result of calculating data for the experimental class and control class.

TABLE IV.9

THE RESULT OF THE TEST FOR THE EXPERIMENTAL CLASS AND THE CONTROL CLASS

Categorize	Experimental class		Control Class	
	Before	After	Before	After
Total Score	1756	1948	1765	1823
Mean	70.24	76.6	70,6	73.44
Standard Deviation	7.75	6.92	7.73	9.23
Variance	60.182	47.982	59.76	85.26
Range	29	23	29	29
N	25	25	25	25

From the table above, it could be seen that the mean score of experimental class before applying REAP strategy was **70.24** and the mean score of experimental class after applying REAP strategy was **76.6** It meant that the experimental class after applying REAP strategy was higher than before applying REAP strategy.

B. THE DATA ANALYSIS

The effect of using REAP strategy could be measured by using pre-test and post-test design. The data analysis used statistical parametric, that was independent t-test.

1. Experimental Class

TABLE IV.10

THE STUDENTS' SCORE OF PRE-TEST IN EXPERIMENTAL CLASS

NO	X	f	Fx	Fx^2	x	x^2	fx^2
1	59	3	177	31329	-11.24	126.3376	379.0128
2	65	8	520	270400	-5.24	27.4576	219.6608
3	71	7	497	247009	0.76	0.5776	4.0432
4	76	4	304	92416	5.76	33.1776	132.7104
5	82	1	82	6724	11.76	138.2976	138.2976
6	88	2	176	30976	17.76	315.4176	630.8352
		N=25	**1756**	**678854**		**641.2656**	**1504.56**

$$Mx = \frac{1756}{25} = 70{,}24$$

$$SDx = \sqrt{\frac{\sum fx^2}{(n)}}$$

$$= \sqrt{\frac{1504{,}56}{(25)}} = \sqrt{60{,}182} = 7{,}75$$

$$S1^2 = \frac{\sum Fx^2}{(n)} = \frac{1504,56}{(25)} = 60.182$$

Based on the calculating of pre-test in experimental class, mean found was 70,24, standard deviation was 7,75 and variance was 60, 182.

TABLE IV.11

THE STUDENTS' SCORE OF POST-TEST IN EXPERIMENTAL CLASS

NO	X	f	FX	FX²	x	x²	fx²
1	65	3	195	38025	-10.92	119.2464	357.7392
2	71	6	426	181476	-4.92	24.2064	145.2384
3	76	6	456	207936	0.08	0.0064	0.0384
4	82	7	574	329476	6.08	36.9664	258.7648
5	88	3	264	69696	12.08	145.9264	437.7792
	N=25	**25**	**1915**	**826609**		**326.352**	**1199.56**

$$Mx = \frac{1915}{25} = 76,6$$

$$SDx = \sqrt{\frac{\sum fx^2}{(n)}}$$

$$= \sqrt{\frac{1199.56}{(25)}} = \sqrt{47.982} = 6.92$$

$$S1^2 = \frac{\sum Fx^2}{(n)} = \frac{1199.56}{(25)} = 47.982$$

Based on the calculating of pre-test in control class, mean found was 76.6, standard deviation was 6.92 and variance was 47.982.

2. Control Class

TABLE IV.12

THE STUDENTS' SCORE OF PRE-TEST IN CONTROL CLASS

NO	Y	f	Fy	Fy^2	Y	y^2	fy^2
1	59	4	236	55696	-11.6	134.56	538.24
2	65	6	390	152100	-5.6	31.36	188.16
3	71	5	355	126025	0.4	0.16	0.8
4	76	7	532	283024	5.4	29.16	204.12
5	82	2	164	26896	11.4	129.96	259.92
6	88	1	88	7744	17.4	302.76	302.76
		N=25	**1765**	**651485**		**627.96**	**1494**

$$My = \frac{1765}{25} = 70{,}6$$

$$SDy = \sqrt{\frac{\sum fy^2}{(n)}}$$

$$= \sqrt{\frac{1494}{(25)}} = \sqrt{59.76} = 7{,}73$$

$$S2^2 = \frac{\sum Fy^2}{(n)} = \frac{1494}{(25)} = 59.76$$

TABLE IV. 13

THE STUDENTS' SCORE OF POST-TEST IN CONTROL CLASS

NO	Y	f	Fy	Fy^2	Y	y^2	fy^2
1	59	1	59	3481	-9.24	85.3776	85.3776
2	65	4	260	67600	-3.24	10.4976	41.9904
3	71	8	568	322624	2.76	7.6176	60.9408
4	76	5	380	144400	7.76	60.2176	301.088
5	82	5	410	168100	13.76	189.3376	946.688
6	88	2	176	30976	19.76	390.4576	780.9152
		25	**1794**	**733700**		**658.128**	**2131.622**

$$My = \frac{1794}{25} = 71{,}76$$

$$SDy = \sqrt{\frac{\sum fy^2}{(n)}}$$

$$= \sqrt{\frac{2131.622}{(25)}} = \sqrt{85.26} = 9.23$$

$$S2^2 = \frac{\sum Fy^2}{(n)} = \frac{2131.622}{(25)} = 85.26$$

To find out the ability of the first year students at State Islamic Senior High School Dumai in comprehending news item reading text without using Read, Encode, Annotate, and Ponder (REAP) strategy and by using Read, Encode, Annotate, and Ponder (REAP) strategy, the data was analyzed by using independent t-test formula.

$$to = \frac{Mx - My}{\sqrt{\frac{S1^2}{n1} + \frac{S2^2}{n2}}}$$

TABLE IV.14
THE STUDENTS' GAIN POST-TEST SCORE
IN EXPERIMENTAL CLASS

NO	X POST TEST	NO	X PRETEST	X	x	x^2
1	71	1	71	0	-6.36	40.4496
2	82	2	76	6	-0.36	0.1296
3	76	3	65	11	4.64	21.5296
4	65	4	59	6	-0.36	0.1296
5	88	5	88	0	-6.36	40.4496
6	82	6	76	6	-0.36	0.1296
7	71	7	65	6	-0.36	0.1296
8	76	8	65	11	4.64	21.5296
9	82	9	71	11	4.64	21.5296
10	82	10	76	6	-0.36	0.1296
11	71	11	65	6	-0.36	0.1296
12	76	12	65	11	4.64	21.5296
13	76	13	71	5	-1.36	1.8496
14	76	14	71	5	-1.36	1.8496
15	71	15	65	6	-0.36	0.1296
16	65	16	59	6	-0.36	0.1296
17	82	17	65	17	10.64	113.2096
18	88	18	82	6	-0.36	0.1296
19	71	19	65	6	-0.36	0.1296
20	82	20	76	6	-0.36	0.1296
21	71	21	71	0	-6.36	40.4496
22	82	22	71	11	4.64	21.5296
23	76	23	71	5	-1.36	1.8496
24	65	24	59	6	-0.36	0.1296
25	88	25	88	0	-0.36	0.1296
	1915		**1756**	**159**		**349.44**

$$Mx = \frac{159}{25} = 6.36$$

$$SDx = \sqrt{\frac{\sum x^2}{(n)}}$$

$$= \sqrt{\frac{349.44}{(25)}} = \sqrt{13.97} = 3.73$$

$$S1^2 = \frac{\sum x^1}{(n)} = \frac{349.44}{(25)} = 13.97$$

TABLE IV. 15
THE STUDENTS' GAIN POST-TEST SCORE
IN CONTROL CLASS

NO	Y	NO	Y	Y	y	y^2
1	71	1	65	6	3.16	9.9856
2	82	2	76	6	3.16	9.9856
3	76	3	76	0	-2.82	7.9524
4	88	4	82	6	3.16	9.9856
5	82	5	76	6	3.16	9.9856
6	71	6	65	6	3.16	9.9856
7	65	7	59	6	3.16	9.9856
8	76	8	71	5	2.16	4.6656
9	82	9	76	6	3.16	9.9856
10	71	10	65	6	3.16	9.9856
11	88	11	88	0	-2.82	7.9524
12	76	12	76	0	-2.82	7.9524
13	71	13	71	0	-2.82	7.9524
14	65	14	59	6	3.16	9.9856
15	71	15	71	0	-2.82	7.9524
16	65	16	65	0	-2.82	7.9524
17	71	17	71	0	-2.82	7.9524
18	76	18	76	0	-2.82	7.9524
19	82	19	82	0	-2.82	7.9524
20	76	20	76	0	-2.82	7.9524
21	65	21	65	0	-2.82	7.9524
22	65	22	65	0	-2.82	7.9524
23	59	23	59	0	-2.82	7.9524
24	71	24	71	0	-2.82	7.9524
25	71	25	59	12	9.16	83.9056
	1836		**1765**	**71**		**289.7752**

$$My = \frac{71}{25} = 2.84$$

$$SDy = \sqrt{\frac{\sum y^2}{(n)}}$$

$$= \sqrt{\frac{289.7752}{(25)}} = \sqrt{11.59} = 3.40$$

$$S2^2 = \frac{\sum y^2}{(n)} = \frac{289.7752}{(25)} = 11.59$$

After the calculating of the mean, the standard variance, and the variance got toward the gain, it should be input to t-test formula:

$$to = \frac{Mx - My}{\sqrt{\frac{S1^2}{n1} + \frac{S2^2}{n2}}}$$

$$to = \frac{6.36 - 2.84}{\sqrt{\frac{13,97}{25} + \frac{11.59}{25}}}$$

$$to = \frac{3.52}{\sqrt{0,5588 + 0,4636}}$$

$$to = \frac{3.52}{\sqrt{1,0024}} = \frac{3.52}{1,011} = 3.481$$

$$df = n1 + n2$$

$$df = 25 + 25 - 2 = 48$$

Based on the result above, it was interpreted by comparing t_o and t_{table}. df= 25+25-2=48 (there is no df 48, therefore it used df 50). From the t_{table}, at 5% significant level (2,01) and at 1% significant level (2,68) found that t_o was higher than t_{table} (2,01 < 3.481 > 2,68).

The interpretation of testing criteria:

1. If : $T_o > T_{table}$, The alternative hypothesis (h_a) is accepted. It means that: there is significant effect of using Read, Encode, Annotate, and Ponder (REAP) Strategy toward Reading Comprehension of the First Year Student at State Islamic Senior High School Dumai.
2. If : $T_o \leq T_{table}$, the null hypothesis (h_o) is rejected. It means that there is no significant effect of using Read, Encode, Annotate, and Ponder (REAP) Strategy toward Reading Comprehension of the First Year Student at State Islamic Senior High School Dumai.

In conclusion, H_o was rejected and H_a was accepted (2.01 < 3.481 > 2.68). It means that there is significant effect of using REAP strategy toward the reading comprehension of the first year student at State Islamic Senior High School Dumai.

To identify the level of the effect of using REAP strategy toward the reading comprehension of the first year, it was done by calculating coefficient (r^2) by using the following formula:

$$r^2 = \frac{t^2}{t^2 + n - 2}$$

$$r^2 = \frac{3.481^2}{3.481^2 + 50 - 2}$$

$$r^2 = \frac{12.117361}{60.117361}$$

$$r^2 = 0.20156$$

To find out the percentage of coefficient effect (K_p), it used the following formula:

$$K_p = r^2 \times 100\%$$

$$K_p = 0{,}20156 \times 100\%$$

$$K_p = 20{,}15\%$$

Based on the analysis data about the students ability in comprehending news item text, it showed that mean of the students' ability in comprehending news item by using REAP strategy was higher than mean of the students' ability in comprehending news item by using discussion strategy. The differences treatment of two classes taught to the homogeny students were effected the differences students' scores in comprehending news item text.

Therefore, the result of this analysis could answer the formulation of the problem:

1. The students' ability of the first year students at State Islamic Senior High School Dumai in comprehending news item reading text by using discussion strategy had lower score. It was effected by different treatment used in teaching learning process.
2. The students' ability of the first year students at State Islamic Senior High School Dumai in comprehending news item reading text by using Read, Encode, Annotate, and Ponder (REAP) had higher score.

3. There is significant effect of using Read, Encode, Annotate, and Ponder (REAP) strategy in comprehending news item reading text of the first year students at State Islamic Senior High School Dumai.

CHAPTER V

CONCLUSION AND SUGGESTION

A. THE CONCLUSION

After analyzing the data by using Independent t-test formula, the researcher found that the result of t_o was higher than $t_{table.}$ (2.01< 3.481 > 2.68). It showed that the different treatment used in teaching reading gave the different result.

1. The students' ability of the first year students at State Islamic Senior High School Dumai in comprehending news item reading text by using discussion strategy had lower score. It can be seen from the students' score of post-test.
2. The students' ability of the first year students at State Islamic Senior High School Dumai in comprehending news item reading text by using Read, Encode, Annotate, and Ponder (REAP) had higher score. It can be seen from the students' score of post-test.
3. There is significant effect of using Read, Encode, Annotate, and Ponder (REAP) strategy in comprehending news item reading text of the first year students at State Islamic Senior High School Dumai.

The percentage of coefficient effect was 20.15 %. It meant that the effect of using REAP strategy had low significant toward reading comprehension. The others factors (79.85%) were effected by the internal factor and the external factor. The internal factor was the time was limited.

The external factors may be effected by the students' environment, the students' motivation that cannot be controlled by the researcher in this research.

B. THE SUGGESTION

Based on the conclusion above, there are some suggestions that the writer would like to state:

1. Based on the research finding, REAP can effect the students' reading comprehension. Therefore, for the candidate of the teacher or the teacher can use REAP strategy as a variation strategy in the teaching reading.
2. The strategy used by the teacher is a way to the students to make them be more active. Therefore, the students should use the strategy to improve the reading comprehension.
3. For the other researcher who want conducting research about REAP strategy, they can focus on the others skill such as writing, listening, or speaking.

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